



IN REPLY REFER TO:

# United States Department of the Interior

## BUREAU OF INDIAN AFFAIRS

Eastern Oklahoma Region

Eastern Oklahoma Regional Office

P.O. Box 8002

Muskogee, OK 74402-8002

# COPY



Division of Environmental,  
Safety and Cultural Resources Management

JAN 12 2012

### Memorandum

To: Superintendent, Wewoka Agency, Eastern Oklahoma Region

From: Acting Regional Director, Eastern Oklahoma Region *Karen Ketcher*

Subject: Environmental Assessment (EA) – Snake Creek Road Improvement Project

The Final Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) have been approved for the Seminole Nation of Oklahoma Snake Creek Road improvement project, Contract Number CTG10T90955, located in Seminole County, Oklahoma. These documents and a Notice of Availability (NOA) are attached for reference.

In accordance with Title 40, Code of Federal Regulations (CFR), Part 1506.6, Regulations for Implementing the Procedural Provision of the National Environmental Policy Act, the EORO will publish the NOA in a local newspaper of general circulation. The NOA of the FONSI shall be made publicly available for 30 days. Any comments received will be provided to the Wewoka Agency (Agency). Upon conclusion of the 30-day public review period the Agency should verify that all public comments have been adequately addressed before implementation of the proposed action.

If additional information is required, please contact Ms. Jonna Polk, Division Chief, Division of Environmental, Safety and Cultural Resources Management, Eastern Oklahoma Regional Office, at (918) 781-4660.

Attachment(s)

**UNITED STATES DEPARTMENT OF THE INTERIOR**

**AGENCY:** BUREAU OF INDIAN AFFAIRS, EASTERN OKLAHOMA REGION

**ACTION:** NOTICE

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**SUMMARY:** This Notice advises the public that a final Environmental Assessment (EA) and a Finding of No Significant Impact (FONSI) for the Seminole Nation of Oklahoma Snake Creek Road improvement project in Seminole County, Oklahoma, are available for final public review. Based on the EA, it has been determined that the action will not result in significant impacts to the quality of the human environment; therefore an Environmental Impact Statement is not required. This Notice is furnished as required by the National Environmental Policy Act (NEPA) regulations, Title 40, Code of Federal Regulations (CFR), Part 1506.6(b), to provide public notice and to inform those persons and agencies who may be interested or affected. The FONSI is a finding on environmental effects and not a decision to proceed with an action; therefore, the decision cannot be appealed. Title 25, CFR, Part 2.7 requires a 30-day appeal period after the decision to proceed with the action is made before the action may be implemented. Appeal information will be made publically available when the decision to proceed is made.


**DATES:** The EA is available for public review beginning January 31, 2012. Written comments should be received on or before February 30, 2012. Comments are solicited and should be directed to the Bureau of Indian Affairs (BIA), Eastern Oklahoma Regional Office (EORO), at the address provided below. Individuals wishing copies of this EA for review should immediately contact the BIA at (918) 781-4660.

**ADDRESS:** Comments and written requests for the EA should be addressed to: Regional Director, BIA, EORO, P.O. Box 8002, Muskogee, Oklahoma 74402-8002, Telephone Number: (918) 781-4600.



**FOR FURTHER INFORMATION CONTACT:** Ms. Jonna Polk, Division Chief, Division of Environmental, Safety and Cultural Resources Management, BIA, EORO, P.O. Box 8002, Muskogee, Oklahoma 74402-8002, Telephone Number: (918) 781-4660.

**SUPPLEMENTAL INFORMATION.** The BIA has approved an EA and FONSI for the Seminole Nation of Oklahoma Snake Creek Road improvement project encompassing approximately 3.0 miles of existing county roads in Seminole County, Oklahoma. The improvements will consist of road widening, drainage structure upgrades and asphalt paving. This Notice is furnished as required by the National Environmental Policy Act (NEPA) regulations, Title 40, Code of Federal Regulations (CFR), Part 1506.6 and 1506.6(b), to provide public notice and to inform those persons and agencies who may be interested or affected. Funding of the project constitutes a Federal action under the governing regulations for compliance with Section 102(2) of NEPA and requires a concise public document to be prepared that analyzes environmental impacts to the human environment. The EA has been prepared in accordance with the requirements of NEPA, as amended, (Title 42 U.S.C. 4321), the U.S. Department of the Interior Manual, (516 DM 10), and other applicable environmental statutes and regulations.

  
Acting Regional Director  
Bureau of Indian Affairs  
Eastern Oklahoma Region  
U. S. Department of the Interior

1-12-12  
Date

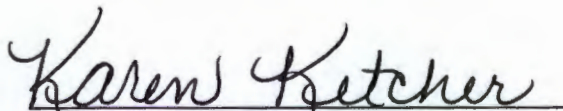
## Finding of No Significant Impact

Seminole Nation of Oklahoma;  
Snake Creek Road Improvement Project CT-G10T-90955;  
3.0 miles; Section 13, T10N, R6E; Seminole County, Oklahoma

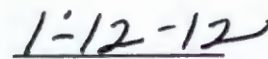
Based on the attached final Environmental Assessment (EA) for the Seminole Nation of Oklahoma Snake Creek Road improvement project in Seminole County, Oklahoma, it is determined that by the implementation of the proposed action and environmental mitigation measures specified in the EA, the project will have no significant impact on the quality of the human environment. In accordance with Section 102 (2) (c) of the National Environmental Policy Act of 1969, as amended, an environmental impact statement will not be required.

This determination is supported by the following findings:

1. Agency and public involvement was conducted and no environmental issues related to the proposed action were identified. Alternative courses of action and mitigation measures were developed in response to environmental concerns and issues.
2. The EA discloses the environmental consequences of the proposed action and two potentially viable alternatives, which includes the "no action" alternative.
3. Protective measures will be taken to protect air and water quality as outlined in the Environmental Consequences section.
4. The proposed action will not jeopardize threatened and endangered species.
5. There are no adverse effects on historic properties for the purpose of 36 CFR 800.9 (b).



Acting Regional Director  
Eastern Oklahoma Region  
Bureau of Indian Affairs  
U.S. Department of the Interior

  
Date



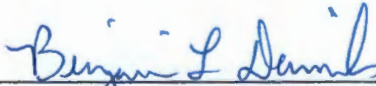
Division of Environmental,  
Safety and Cultural Resources Management

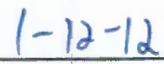
**Technical Brief  
Environmental Assessment (EA)  
Snake Creek Road Improvement Project  
Seminole County, Oklahoma**

**Brief.** The Federal action is approval of the Snake Creek Road improvement project in Seminole County, Oklahoma. The project encompasses approximately 3.0 miles of existing county roads and the improvements will consist of asphalt paving, road widening and drainage structure upgrades.

The EA was prepared by the Division of Environmental, Safety and Cultural Resources Management and is in compliance with the National Environmental Policy Act (NEPA) of 1969, as amended, and 59 IAM 3-H, the BIA NEPA Handbook. The Regional Environmental Scientist has reviewed the document and agrees with its findings.

**Recommendation:** Approval of the subject document is recommended as the Tribal action meets the Federal requirements of NEPA and 59 IAM 3-H.

  
\_\_\_\_\_  
Acting Regional Environmental Scientist

  
\_\_\_\_\_  
Date

**U.S. Department of the Interior  
Bureau of Indian Affairs**

**Final Environmental Assessment for the Proposed Snake Creek Road  
Seminole Nation of Oklahoma Road Construction Project  
Seminole County, Oklahoma**



**January 6, 2012**

**Eastern Oklahoma Regional Office  
Division of Environmental, Safety, and Cultural Resources Management  
Muskogee, Oklahoma**



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## **1.0 Purpose of and Need for Action**

The purpose of the proposed action is to provide local tribal members a safe and efficient traffic route within the transportation network of the Seminole Nation of Oklahoma. The tribal members in this area use this road as a route into town. The existing road is subject to flooding in seasonal rainy weather, making it hazardous during rain events when high water is present. Therefore, the Seminole Nation selected this specific segment of their transportation network as one of the projects funded through the Bureau of Indian Affairs.

The existing county roads, NS-358, EW-116 and NS-359, regionally known as Snake Creek Road, will be vertically realigned, paved and widened with two modern-sized driving lanes, shoulders and open ditches. The roadway right-of-way (ROW) will increase to accommodate improvements and will range from approximately 40 to 80 feet total width. Roadside drainage structures will be upgraded and additional side drains will be constructed. Several existing cross drains will also be replaced and new cross drains will be added to the roadway to accommodate for stormwater drainage from rain events if required.

The existing road is narrow with 33-foot ROWs and no shoulders, which make it difficult for two vehicles to pass in opposite directions. Also, the road has poor vertical alignment, limiting driver sight distances and making the road difficult to maneuver at consistent speeds. The existing ROW does not provide sufficient area to perform the necessary drainage system upgrades. Therefore, it will be necessary to acquire additional ROW from adjacent landowners.

Some of the drainage structures along the 3.0 mile segment of roadway do not meet the Federal Standard requirements for a modern highway. These drainage units are in need of improvement, replacement and/or upgrade to accommodate fluctuating flows of stormwater runoff during rain events. This improvement project is needed to upgrade the existing road to the Federal Highway Standards for a transportation network that will provide a safe, efficient and modern transportation network for the people, commerce and community of Seminole, Sylvian and Cromwell in Seminole County, Oklahoma. A project location map (Figure 1) in Appendix A shows the vicinity of the proposed project within the Eastern Oklahoma Region service area.



## **2.0 Alternatives**

The project calls for roadway improvements beginning approximately 1.0 mile south of State Highway 99 on NS-358, extending north 1.0 mile along the west section line of Section 13, then extending east 1.0 mile along the south section line of Section 13, then extending north 1.0 mile along the eastern section line of Section 13, and ending at the intersection of State Highway 99A and NS-359, Township 10 North, Range 6 East, Indian Base Meridian. An aerial map (Figure 2) showing the location of the Snake Creek Road project area is located in Appendix A.

Development of alternatives was based solely on budgetary constraints and the Bureau's obligation to meet the roadway design guidelines approved by the Federal Highway Administration, the Oklahoma Department of Transportation, and the American Association of State Highway and Transportation Officials. Based on these factors, the following alternatives were developed for the project.

### **2.1 No Action Alternative**

This alternative leaves the 3.0 mile segment of county roads (NS-358, EW-116, and NS-359) as is with no road improvements and routine maintenance provided by Seminole County. No borrow material would be required for this alternative. Flooding will continue and it will remain a hazardous route during rainy weather and whenever water levels are elevated. The negative environmental and human impacts would continue under this alternative in the form of the continued deterioration of the road and safety hazards for tribal members as well as the general public using the road. Several points along the length of the proposed road improvement project are shown in photographs 1 through 3 of Appendix A.

### **2.2 Proposed Action Alternative**

The existing roads, NS-358, EW-116, and NS-359, will be vertically realigned, paved and widened to two 12-foot driving lanes, with two foot shoulders and open ditches. Road improvements will require approximately 40 to 80 feet of total ROW. The project road will consist of a roadway comprised of a six-inch stabilized subgrade using 5% lime by weight, a nine-inch layer of aggregate base (Type A), and a double bituminous surface of "chip-seal". All existing roadside drainage structures will be upgraded according to the finalized road design and construction plans. Additional structures will be constructed to accommodate for stormwater drainage from rain events. Fill material required for the project will be acquired from a proposed borrow site(s) located in Section 8, Township 10 North, Range 7 East, in Seminole County, Oklahoma. A survey map of the borrow pit is located in Appendix A.

The project will alter the vertical alignments of the existing roads to improve driver safety sight distances. As a result, additional right-of-ways will be required to accommodate new embankments. All additional right-of-way acquisition will be the responsibility of Seminole County. After construction, long term road maintenance will be provided by Seminole County. The proposed action provides the best overall safety improvement for the proposed action and meets the Federal Highway Administration standards for a modern transportation network. The construction would be accomplished by using BIA Tribal Transportation Funds.

### **2.3 Existing Road Overlay Alternative**

The 3.0 mile segment of roads (NS-358, EW-116, and NS-359) will be graded and paved with asphalt within the existing road ROW. Existing drainage structures would be replaced as needed, but not improved. No borrow material would be required for this alternative. After construction, long term road maintenance will be provided by Seminole County.

Based on federal highway standards for new road construction, budget, and compliance to all federal regulations and laws, including NEPA requirements (40 CFR 1502.14), only the No Action Alternative and the Proposed Action Alternative will be addressed in this EA. The "existing road overlay" alternative will be eliminated from further analysis because it fails to adequately meet design standards or utilize available federal funding in the best possible way. Actions associated with this alternative would be considered short term corrections to the existing problems and would not, therefore, be considered a viable project for available funding.



### **3.0 Description of the Affected Environment**

This section describes the existing environment within the project area and the resources that may be affected by the alternatives under consideration.

#### **3.1 Land Resources**

Seminole County is located within the Cherokee Platform, a major geologic province that began formation about 320 million years ago, and consists of west-dipping Pennsylvanian sandstones forming cuestas that overlook broad shale plains. Pennsylvanian sedimentary rocks are dominantly marine shale, with interbedded sandstone, limestone, and coal. Thickness is commonly 2,000 to 5,000 feet with depths up to 18,000 feet in the Arkoma basin.

According to the U.S. Department of Agriculture Soil Survey for Seminole County, a total of eight individual soils were identified within the project area. Refer to Figure 3 in Appendix A for a map of soil types and locations. Utilization of these soils for various construction activities may be impacted by unfavorable soil characteristics, such as, low strength, seepage, stability, flooding, cracking, plasticity, soil compression, shrinking, swelling and piping. These undesirable soil conditions can be overcome or minimized through special planning and proper road design.

The major streams of the county enter from the west and generally flow eastward to the Arkansas River. The elevation of the county averages about 900 feet. Topography pattern in the county is a repeating series of ridges and valleys running generally in a north-south direction. The ridges and gentle, west-facing slopes are generally underlaid by sandstone, and the valleys and east-facing slopes are underlaid by shale. Tributaries of the major streams flow parallel to the ridges and valleys. Slopes are nearly level to steep in most of the county. Refer to Figure 4 of Appendix A for a map of the topography of the project area.

#### **3.2 Water Resources**

This project is located within the Canadian River drainage basin. Two unnamed tributaries of Turkey Creek flow through the project corridor in a northwestern direction where they combine with Turkey Creek and continue north to the North Canadian River. Several of the cross drains, side drains and ditches along the road improvement project are shown in photographs 4 through 7 of Appendix A. The Flood Insurance Rate Maps (FIRMs), 40133C0075C and 40133C0100C, were obtained from the Federal Emergency Management Agency's National Flood Insurance Program website at <http://www.fema.gov> and can be referenced in Appendix A as Figures 5 and 6. There are no major sources of ground water near the proposed project area.



### 3.3 Air Resources

Seminole County is within an air attainment area that meets the National Ambient Air Quality Standards (NAAQS) established by the U.S. Environmental Protection Agency (EPA). The County is rural with little or no industrial activity that has Federal/State discharge permits for air emissions. The variation in wind patterns and climate allows for excellent air quality in the County.

The proposed road improvement project is adjacent to State Highway 99A and vehicles utilizing the transportation unit are considered to be the main contributor to volatile air emissions. Fugitive dust from gravel roads is considered to be the main source of particulate matter emissions. Visibility in Seminole County is considered to be excellent, and smog and haze are not prevalent in the area.

### 3.4 Living Resources

Seminole County has an area of 404,806 acres or 632 square miles, and is a mainly rural agricultural area that has stayed relatively undeveloped over time. Healthy ecosystems can be found throughout the county along streams, creeks, forested areas, and open prairies. Biological communities and wildlife habitat that may occur within the project area can be described as follows:

*Openland:* Consists of croplands, pastures, meadows, and areas that are composed of a combination of grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses, and legumes, and wild herbaceous plants. The kinds of wildlife attracted to these areas include bobwhite quail, dove, meadowlark, field sparrow, cottontail rabbit, and red fox.

*Woodland:* Consists of hardwoods or conifers or a mixture of both, with associated grasses, legumes, and wild herbaceous plants. Examples of wildlife attracted to this habitat are wild turkey, woodcock, thrushes, woodpeckers, three squirrels grey fox, raccoon, and deer.

*Wetland:* Consists of water-tolerant plants in open, marshy, or swampy shallow water areas. Examples of wildlife attracted to this habitat are ducks, geese, herons, shore birds, rails, muskrat, mink, and beaver.

*Rangeland:* Consists of wild herbaceous plants and shrubs on range. Examples of wildlife attracted to this habitat are white-tailed deer, quail, dove, and meadowlark.

The project area provides habitat for terrestrial species such as quail, doves, rabbits, squirrels, opossums, foxes, coyotes and other wildlife indigenous to the county. Common vegetative species may include, indiagrass, little bluestem, big bluestem, hairy grama, purpletop, sideoats grama, sand dropseed, southern red oak, loblolly pine, shortleaf pine, eastern cottonwood, sweetgum, pecan, black walnut, green ash, and American sycamore, among others.



The January 14, 2010, U.S. Fish and Wildlife Service (USFWS) threatened and endangered species list for Seminole County, Oklahoma, contains five federally listed threatened and endangered species that may occur in or near the project site. The list is available on the USFWS Oklahoma Ecological Services Field Office website. Included are:

American burying beetle <sup>(2,A)</sup>	<i>Nicrophorus americanus</i>	Endangered
interior least tern <sup>(6,7)</sup>	<i>Sterna antillarum</i>	Endangered
whooping crane <sup>(9)</sup>	<i>Grus americana</i>	Endangered
Arkansas River shiner	<i>Notropis girardi</i>	Threatened, Critical habitat
pipin plover <sup>(10)</sup>	<i>Charadrius melodus</i>	Threatened

<sup>2</sup> Non-Historical Range – This county is not within the documented historic range of the American burying beetle. However, suitable habitat is present and this county is adjacent to at least one county with current positive findings, suggesting American burying beetles are likely to be present within this county.

<sup>A</sup> Unconfirmed – Surveys within the last 15 years are lacking or insufficient to determine presence of the American burying beetle. However, suitable habitat is present and this county is adjacent to at least one county with current positive findings. In some instances, occurrences of American burying beetles have been reported by reputable individuals, but identification has not been verified by a Service biologist or trained entomologist.

<sup>6</sup> Counties with documented occurrences, including breeding activities.

<sup>7</sup> Counties situated within the probable migratory pathway between breeding and winter habitats, and contain sites that could provide stopover habitat during migration.

<sup>9</sup> Counties situated within the current probably migratory pathway between breeding and winter habitats and contain sites that could provide stopover habitat during migration.

<sup>10</sup> Counties situated within the probable migratory pathway between breeding and winter habitats, and contain sites that could provide stopover habitat during migration.

### 3.5 Cultural Resources

Consultation was performed with the Oklahoma State Historic Preservation Office (SHPO) and the Oklahoma Archeological Survey (OAS) regarding the need for survey of the proposed road improvement project. In correspondence dated May 11, 2001, the OAS determined that a field survey would be necessary for the proposed project area. However, in June 2008 a survey was conducted for a waterline that included the road right-of-way. The project as proposed is within a previously surveyed area. Snake Creek Cemetery and unmarked family cemetery are immediately adjacent to the project area. Consultation was conducted between the Seminole Nation Tribal Historic Preservation Officer and the Seminole Nation Transportation Department to protect the cemeteries. All correspondence letters are located in Appendix C.

### 3.6 Socioeconomic Conditions

Employment in Seminole County is limited to local businesses, agriculture and mineral production. Social infrastructure and cultural values of the rural communities are indicated



by the area churches, schools, and local governments. The rural area is primarily an agricultural and residential community. Health services are provided by hospitals and local health clinics located in the nearby towns.

Numerous fire, ambulance and law enforcement agencies provide emergency response services to the project area. Public utilities are supplied to local residents by various gas, electric, and phone companies, as well as rural or city water districts. A local church and several nearby residences located along the road improvement project are shown in photographs 5, 7 and 8 of Appendix A.

According to the U.S. Census Bureau, the population of Seminole County was 24,179 in 2007 and the number of housing units was 11,537. The median income for a household in the county was \$33,207, and about 22.8% of the population was below the poverty line in 2007. About 24.7% of the population is under 18 years old and 16.4% is 65 years old and over.

Seminole County has a well-distributed system of highways that includes Interstate 40; U.S. Highway 270; and, State Highway 3, 9, 39, 56, 59, 99 and 99A. Nearby cities and towns within the county include, Cromwell, Seminole, Bowlegs, Konawa, Maud, Lima, Sasakwa, and Wewoka.

### **3.7 Resource Use Patterns**

Agriculture is a major industry in Seminole County and in the area surrounding the proposed project area. The major crops in the county consist of small grains, alfalfa, grain sorghum, peanuts, and soy-beans. Oil and gas production is also a major industry in the county. The county has large deposits of chert gravel suitable for road construction. Shale deposits near Wewoka are used to produce brick and clay tile. Limestone is in a band from Wewoka to the Canadian River and in a small area near Sasakwa. In the past, several quarries operated to produce primarily crushed rock for road construction and concrete mixes.

Rangeland makes up about 60 percent of the county. Approximately one-half of the area is open prairie, and the other one-half is savannah. The savannah is covered with a mixture of trees and an understory of grasses and forbs. The raising of beef cattle is the main agricultural enterprise in the survey area. A few large ranches are in the county, but most of the rangeland is in livestock farms. Most rangeland is used in conjunction with tame pasture. The grazing of crop stubble and wheat is common and provides additional forage in fall and winter. Native vegetation in many parts of the county has been greatly depleted by continued excessive use. Much of the acreage that was once open grassland is now covered with brush and weeds.

Wooded areas are used for grazing, wildlife habitat, recreation, aesthetics, and conservation of soil and water. The proposed project corridor and surrounding area primarily consists of residential and agricultural private land. Hunting, fishing and other recreational activities may occur on these lands, as well as, gathering of various plants for subsistence, religious or cultural resource purposes.



### **3.8 Other Values**

The subject road is a two-lane graveled road with an average daily traffic count in 2008 of approximately 115 vehicles. The project area is a rural residential environment. Sensitive receptors for noise are located within 100 feet of the construction corridor. The main source of noise is considered to be from vehicle traffic. Emergency response and law enforcement actions are served by Seminole County.

#### **4.0 Environmental Consequences**

This section forms the scientific and analytic basis for comparing the impact of the proposed action and other alternatives, including the no action alternative, on the environment. The consequences of all alternatives will be identified and discussed. The project may impact property owned by tribal members. All adjacent landowners were contacted regarding the project and the needed acquisition of rights-of-way and no concerns were raised that could be considered environmental justice issues.

##### **4.1 Land Resources**

- **No Action Alternative** – Minor damage to the roadside topography may result from routine maintenance, due to grading and clearing of ditches.
- **Proposed Action Alternative** – The topography of the project area will be altered during construction activities due to the vertical realignment of the existing road. Realignment is required in order to increase driver sight distances increasing the overall safety and efficiency of the roadway. These activities will require the cutting and filling of soils within the construction corridor and will result in a positive or negative change in elevation of the new road. Changes in road elevation will affect the slope of ditches and embankments to be constructed along the full length of the roadway. Borrow material will be obtained from an independent site near the project area.

During construction, removal of surface vegetation and working within the new rights-of-way may result in increased erosion and impact the existing topography, soils and geologic setting. These identified impacts are considered to be short term, and in direct correlation to construction activities. With improved ditches and an effective drainage system in place, storm water runoff onto neighboring properties will be controlled and erosion will be minimized. Impacts to land resources within the identified borrow pit area will be similar to construction activities associated with the road improvement project.

##### **4.2 Water Resources**

- **No Action Alternative** – Uncontrolled storm water runoff and continued flooding will increase erosion and the sediment loading to local receiving streams. It is also likely to damage the existing roadbed, eventually causing failure of the roadway and requiring costly repairs.
- **Proposed Action Alternative** – Impacts are directly related to surface vegetation removal and soil disturbance, resulting in increased sediment loading to receiving water bodies.



The soils within the construction area located near streams may require stabilization to support construction activities. If construction occurs during October through April, the normal wet season, impacts may occur to the construction site due to flooding, which could require dewatering and result in road wash outs.

The receiving streams for rainfall runoff from the project area are two unnamed tributaries of Turkey Creek, which in turn flows into the North Canadian River. There is a possibility that these bodies of water could receive increased sediment loading during heavy rainfall events.

#### **4.3 Air Resources**

- **No Action Alternative** – Air emissions from maintenance activities are likely to occur. These impacts are considered to be limited to the duration of the activity and short term. No significant impacts are anticipated.
- **Proposed Action Alternative** – Increased air emissions are anticipated to occur only throughout the duration of construction activities and will be considered a short term impact. These increased air emissions will include vehicle exhaust and dust particulates.

#### **4.4 Living Resources**

- **No Action Alternative** – The land use by flora and fauna may be impacted during routine maintenance activities on the existing road.
- **Proposed Action Alternative** – The land use by flora and fauna may be impacted during construction. Activities are expected to cause wildlife to temporarily relocate into the surrounding environment. Some habitat will be lost due to installation of new road embankments, but sufficient habitat is available for wildlife to adjust.

Due to the presence of potential American burying beetle (ABB) habitat within the project area, presence or absence surveys were conducted according to the U.S. Fish and Wildlife Service (USFWS) survey protocol. Survey results were negative and a "no effect" determination was made for this species in relation to the proposed action. Final concurrence was obtained from the USFWS and is including in Appendix B.

A "no effect" determination was made for all other federally listed species due to the lack of suitable habitat existing within the project area. No other mitigations or consultations are required for these species in order to fully comply with the Endangered Species Act. All correspondence documents can be referenced in Appendix B of the EA. A "no effect" determination was also made for the bald eagle and other migratory birds as suitable habitat does not exist within the proposed project area.



#### **4.5 Cultural Resources**

- **No Action Alternative** – No environmental impacts were identified.
- **Proposed Action Alternative** – The road and drainage plans were developed to exclude the use of heavy equipment between the roadbed and limit of construction on the west side of the Snake Creek Church Cemetery. Construction activities will not extend past the present western fence line at the "Haney Family Cemetery". The Seminole Nation Tribal Historic Preservation Officer will be involved during construction activities at both cemetery locations. No historic properties were found as a result of an archeological survey of the borrow pit.

Based upon implementation of the above protection measures, the road as designed will not affect the cemeteries.

#### **4.6 Socioeconomic Conditions**

- **No Action Alternative** – Normal daily traffic may be hindered by routine road maintenance activities being performed by the County.
- **Proposed Action Alternative** – Impacts are expected to occur to community social infrastructures. These impacts are not anticipated to be significant as long as the construction allows for travel into these areas and the construction does not disturb any resource of cultural significance. During construction, some public utilities may need to be relocated. Any disruption would only be temporary. Some delays may occur during construction as lanes are closed or traffic is detoured.

Minimal access will be maintained to allow the local fire department, other emergency vehicles, and land owners free access in and out of the construction area. The project will result in an improved and safer roadway, which will cause faster travel throughout the area.

#### **4.7 Resource Use Patterns**

- **No Action Alternative** – No environmental impacts were identified.
- **Proposed Action Alternative** – Securing additional rights-of-way will result in some loss of property currently being used for other resource uses. This loss is not considered to be significant. The overall transportation network in the area will be positively impacted, allowing a greater flow of traffic and controlling stormwater runoff.

#### **4.8 Other Values**

- **No Action Alternative** – No impacts were identified for noise; however impacts to public health and safety may occur due to narrow roads, inadequate passing lanes,



high speeds, poor use of signs regarding road hazards, and flooding during heavy rain events. Noise is not considered a problem due to the low amount of traffic utilizing the existing roads.

- **Proposed Action Alternative** – Due to the rural location of the project area and low number of residents along the construction corridor, increased noise from activities will not be considered a detrimental factor. Travel time, vehicle speed, and an increase in traffic must be considered during ongoing construction activities to protect public health and safety.

## **5.0 Mitigation Measures**

Mitigation measures will be presented to reduce or eliminate any adverse effects identified.

### **5.1 Land Resources**

- **No Action Alternative** – None are required.
- **Proposed Action Alternative** – A Storm Water Pollution Prevention Plan (SWPPP) will be implemented to control sediment and erosion before initiation of construction activities.

### **5.2 Water Resources**

- **No Action Alternative** – None are required.
- **Proposed Action Alternative** – Adequate erosion and sediment controls will be implemented to minimize the potential of increased siltation loading. These proposed controls may include the following: permanent sodding, sprigging or seeding, vegetative mulching, preservation of existing vegetation, temporary silt fences and dikes, paved ditch with ditch liner protection, and temporary sediment removal. Haul roads will be dampened for dust control, loaded haul trucks will be covered with tarpaulin, and excess dirt will be removed from the road daily.

### **5.3 Air Resources**

- **No Action Alternative** – None are required.
- **Proposed Action Alternative** – Dust control measures, such as wetting the road surface and covering haul vehicles, will be employed to eliminate or reduce dust emissions.

### **5.4 Living Resources**

- **No Action Alternative** – None are required.
- **Proposed Action Alternative** – A SWPPP will be implemented to control sediment and erosion before initiation of construction activities. Expedient re-vegetation of areas disturbed will restore the area and allow it to once again support wildlife resource uses.

### **5.5 Cultural Resources**

- **No Action Alternative** – None are required.



- **Proposed Action Alternative** – The Seminole Nation Tribal Historic Preservation Officer will be involved during construction activities at both cemetery locations. .

#### **5.6 Socioeconomic Conditions**

- **No Action Alternative** – None are required.
- **Proposed Action Alternative** – Adequate signs will be posted to inform the public of road closure and alternate routes to take around the area of construction. Notice will be made to announce any temporary loss of public utilities.

#### **5.7 Resource Use Patterns**

- **No Action Alternative** – None are required.
- **Proposed Action Alternative** – Mitigations measures, including a draft SWPPP summary sheet, can be referenced within the engineering plans for this road improvement project located in Appendix E of this document.

#### **5.8 Other Values**

- **No Action Alternative** – None are required.
- **Proposed Action Alternative** – Safe engineering and construction practices, which include the use of detours, flagging, signage, and equipment alarms, will be strictly adhered to as specified in the engineering plans for this project. For a more extensive list of these mitigations reference the road engineering design plans in Appendix E.

## **6.0 Consultation and Coordination**

The Bureau of Indian Affairs, Eastern Oklahoma Regional Office, solicited comments from various Federal, Tribal, state and local governments regarding the Snake Creek Road improvement project for compliance with the National Environmental Policy Act of 1969 (NEPA), as amended. The list below provides a brief summary of the solicitation responses received. The BIA responses to the comments received during the scoping process are provided below. All consultation responses are located in Appendix D of this environmental assessment.

Oklahoma Archeological Survey	Response dated October 6, 2011.
Oklahoma State Historic Preservation Office	Response dated October 19, 2011.
Seminole Nation of Oklahoma	Response dated February 1, 2008.
U.S. Army Corps of Engineers	Response dated April 23, 2008.
Oklahoma Department of Environmental Quality	Response dated February 4, 2008.
Oklahoma Water Resources Board, Floodplain Administrator	Response dated February 4, 2008.
Oklahoma Water Resources Board, Water Quality Division	Response dated January 31, 2008.
Oklahoma Scenic Rivers Commission	Response dated January 31, 2008.
Oklahoma Natural Heritage Inventory	Response dated January 31, 2008.
U.S.D.A Natural Resources Conservation Service	Response dated January 25, 2008.
Seminole County Commissioner	Response dated January 25, 2008.
Oklahoma Department of Wildlife Conservation	Response dated February 29, 2008.
Oklahoma Department of Transportation	No response.
Seminole County Floodplain Administrator	No response.
U.S. Environmental Protection Agency	No response.
Oklahoma Department of Mines	No response.
U.S. Geological Survey	No response.

- The Oklahoma Archeological Survey stated that they had received a cultural resources survey, but deferred to the Oklahoma SHPO on the potential eligibility of structures identified in the report.

Response – This comment was noted and has been incorporated into the environmental assessment process. The Oklahoma SHPO was consulted regarding the structures.

- The Oklahoma State Historic Preservation Office, “We have received and reviewed the documentation concerning the referenced project in Seminole County. Additionally, we have examined the information contained in the Oklahoma Landmarks Inventory (OLI) files and other materials on historic resources available in our office. We find that there are no historic properties affected by the referenced project.”

Response – This comment was noted and has been incorporated into the environmental assessment process.



- The Seminole Nation of Oklahoma stated, "...we are not aware of any Seminole Nation of Oklahoma potential social, economic or environmental sites located in the project area."

Response – This comment was noted and has been incorporated into the environmental assessment process.

- The U.S. Army Corps of Engineers stated, "The provided information does not indicate that a placement of dredged or fill material will be required, permanently or temporarily, into any 'waters of the United States,' including jurisdictional wetlands. Therefore, your proposal is not subject to regulation pursuant to Section 404 of the Clean Water Act, and a Department of the Army (DA) permit will not be required."

Response – This comment was noted and has been incorporated into the environmental assessment process.

- The Oklahoma Department of Environmental Quality stated, "Prior to beginning any construction project, a determination should be made as to whether an Oklahoma Pollutant Discharge Elimination System (OPDES) permit for the storm water runoff is required during the construction phase of that project. Oklahoma is currently in attainment with Federal Air Quality Regulation; therefore, during any construction, reasonable precautions must be taken to protect air quality by minimizing fugitive dust emissions."

Response – This comment was noted and has been incorporated into the environmental assessment process. All applicable permits will be obtained and mitigations measures will be implemented to minimize fugitive dust emissions and protect air quality.

- The Oklahoma Water Resources Board Floodplain Administrator recommended that we contact the local floodplain administrator for possible permit requirements for the project.

Response – This comment was noted and has been incorporated into the environmental assessment process. The Seminole County Floodplain Administrator was included in the scoping process.

- The Oklahoma State Water Resources Board (OWRB), Water Quality Division, suggested that we contact the County Floodplain Administrator and Oklahoma Department of Transportation. The OWRB commented that if stream water was to be used during the construction process then the necessary water rights and permits must be obtained from the OWRB. It was also stated, "We encourage the expeditious use of best management practices to avoid the introduction or release of materials into the adjacent environment that could then migrate into nearby surface or groundwater."



Response – All suggested agencies were included in the scoping process for this environmental assessment by the EORO. All necessary permits and water rights will be obtained from the OWRB before project implementation. Adequate environmental control measures to reduce the possibility of increased sediment loading into unnamed tributaries of Turkey Creek and the North Canadian River will be implemented, including the use of extensive best management practices and a Storm Water Pollution Prevention Plan.

- The Oklahoma Scenic Rivers Commission stated, "This proposed project will have no adverse impact on any of Oklahoma's Scenic River Areas."

Response – This comment was noted and has been incorporated into the environmental assessment process.

- The Oklahoma Natural Heritage Inventory (ONHI) stated, "...we have reviewed the information currently in the Oklahoma Natural Heritage Inventory database and have found no record(s) of elements of concern at or near the location(s) you describe." The OHNI also suggested that we consult with the U.S. Fish and Wildlife Service concerning species of federal interest.

Response – This comment was noted and has been incorporated into the environmental assessment process.

- The Natural Resource Conservation Service responded by enclosing a completed Farmland Conversion Impact Rating form for the proposed action.

Response – This comment was noted and has been incorporated into the environmental assessment process.

- The Seminole County Commissioner did not have comments regarding the proposed action.

Response – This comment was noted and has been incorporated into the environmental assessment process.

- The Oklahoma Department of Wildlife Conservation (ODWC) stated, "Please understand that due to time and personnel constraints, the ODWC has not performed an actual field survey of the proposed site location. The information sent to this office regarding the proposed project has been reviewed and compared against our current records for endangered and threatened species. The ODWC concurs with the preferred alternative chosen in the assessment and believes this alternative will not have significant lasting negative impacts to state-listed threatened and/or endangered species or fish and wildlife resources of the state."

Response – This comment was noted and has been incorporated into the environmental assessment process.



**7.0    List of Preparers**

- Benjamin Daniels, Environmental Protection Specialist, EORO
- Larry Haikey, Regional Archeologist, EORO
- Jonna Polk, Regional Environmental Scientist, EORO

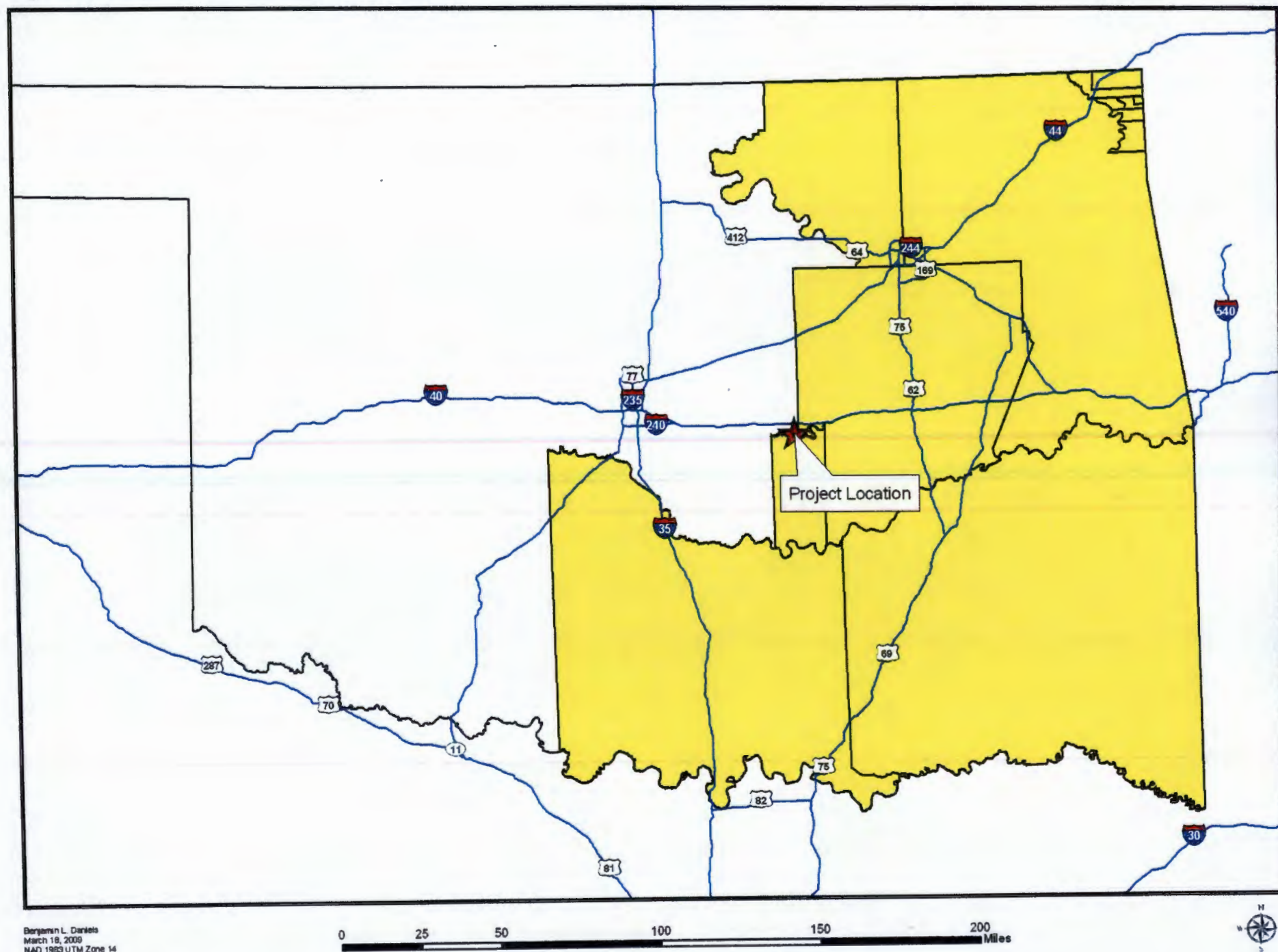
## 8.0 References

- Soil Survey of Seminole County, Oklahoma. Soil Conservation Service
- Seminole County, Oklahoma from Wikipedia the free encyclopedia. Wikipedia. Website: [http://en.wikipedia.org/wiki/Seminole\\_County,\\_Oklahoma](http://en.wikipedia.org/wiki/Seminole_County,_Oklahoma)
- Seminole County, Oklahoma QuickFacts. U.S. Census Bureau, State and County QuickFacts. Website: <http://www.census.gov/index.html>
- Historical Atlas of Oklahoma. John Morris, Charles R. Goins, and Edwin C. McReynolds: 1965, updated 1986.
- Snake Creek Road Improvement Design Plans – CT-G10T-90955. Horizon Engineering Services Co.
- General Highway Map, Seminole County, Oklahoma. Oklahoma Department of Transportation, Federal Highway Administration
- Water Atlas of Oklahoma. University Center for Water Research, Oklahoma State University, Stillwater, Oklahoma: March 1983
- Rural Water Systems in Oklahoma. Oklahoma Water Resources Board, Planning and Management Division: January 1998
- Erosion Control Plan. Horizon Engineering Services Co.
- Stormwater Pollution Prevention Plan. Horizon Engineering Services Co.

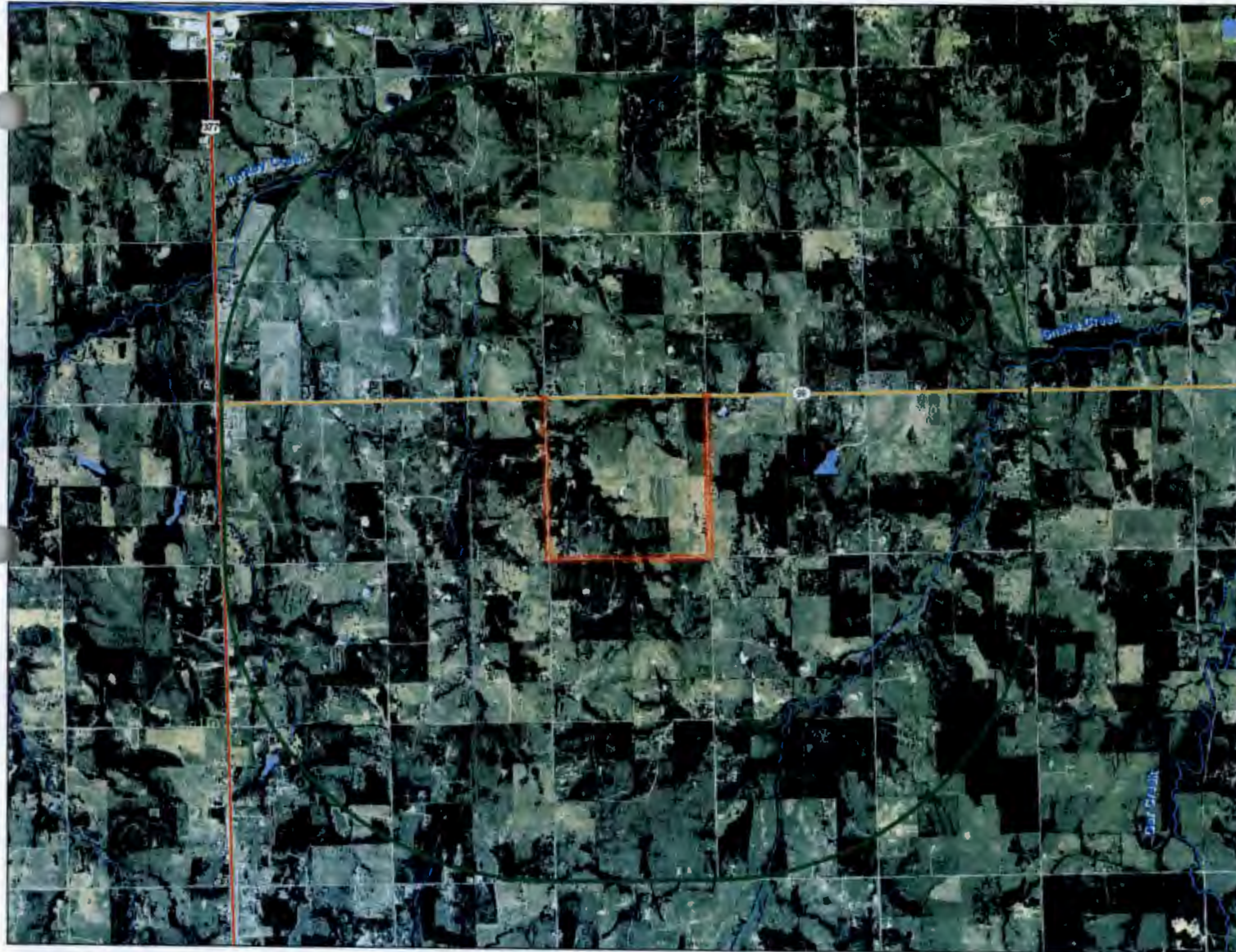


**APPENDIX A**  
**PROJECT MAPS & PHOTOGRAPHS**

Figure 1. Project Location Map









**Bureau of Indian Affairs  
Eastern Oklahoma Region**

Snake Creek Road,  
CT-G10T-90923  
Seminole County

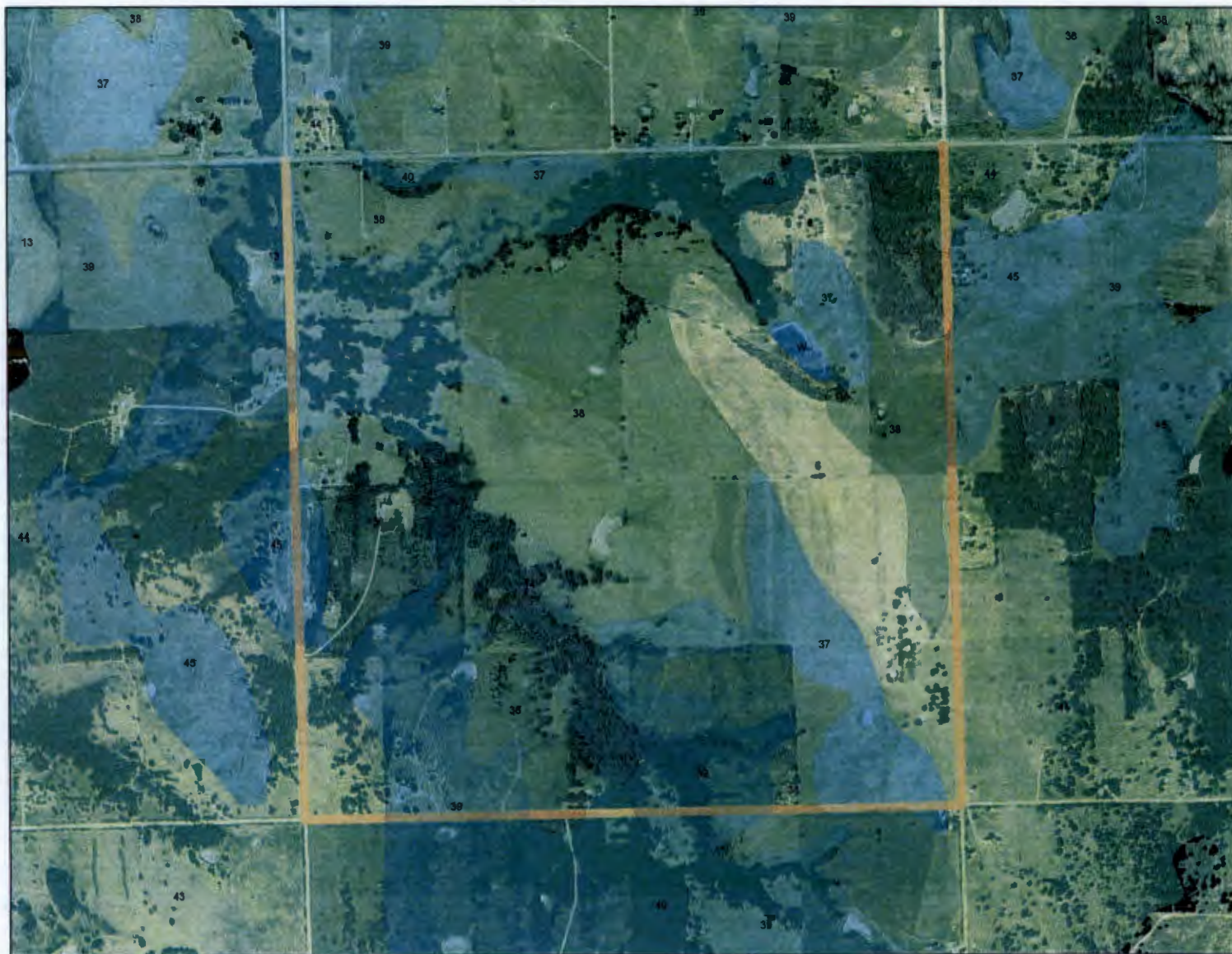
**Legend**

-  Construction Corridor
-  Project Area



**Figure 2. Project Area Map**





# **Bureau of Indian Affairs Eastern Oklahoma Region**

Snake Creek Road,  
CT-G10T-90923  
Seminole County

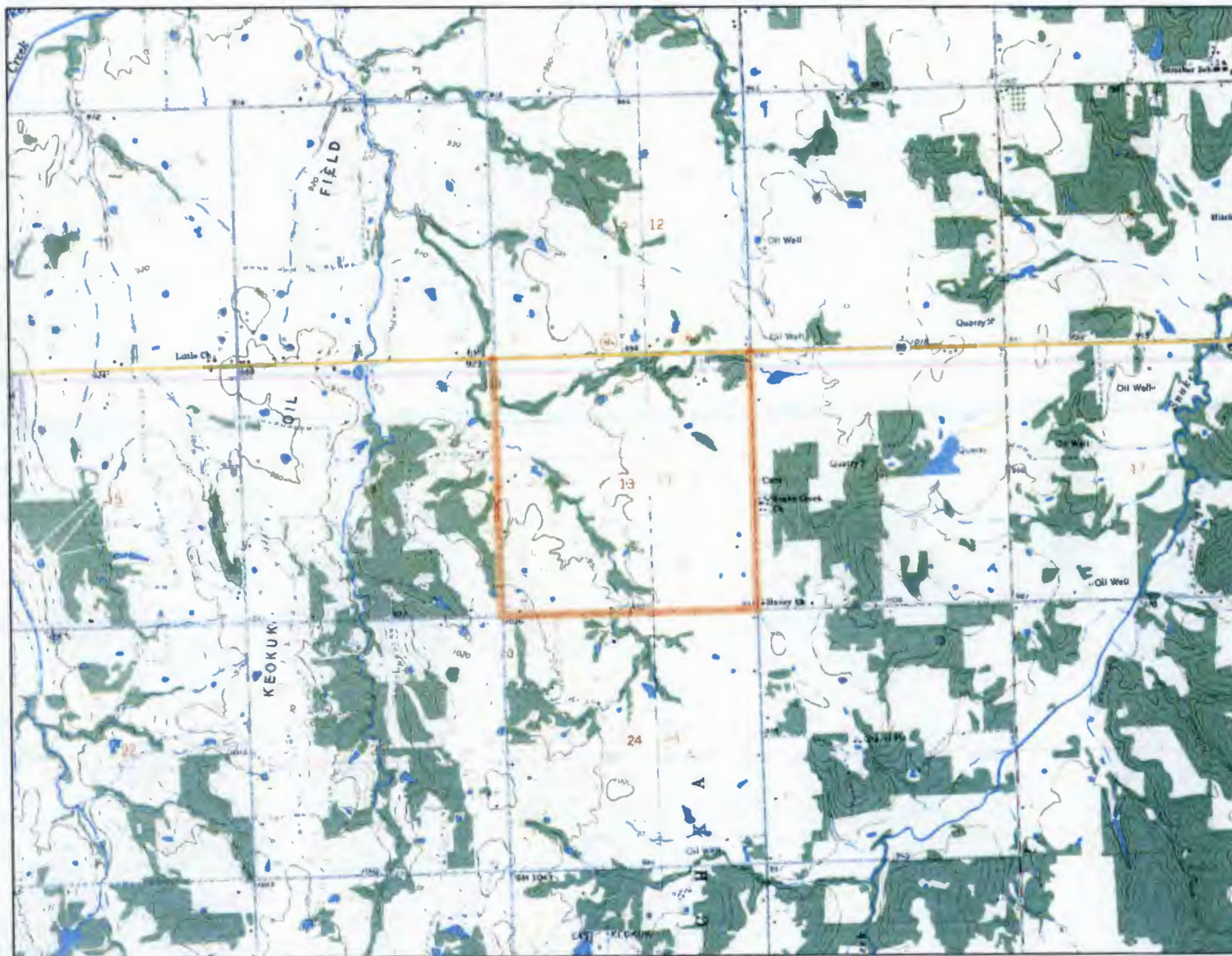
## **Legend**

- Construction Corridor
- 9 - Chickasha loess, 2 to 5 percent slopes
- 13 - Gowton loam
- 14 - Gowton silt
- 37 - Seminole loam, 1 to 3 percent slopes
- 38 - Seminole loam, 2 to 5 percent slopes, eroded
- 38 - Seminole, Chickasha, and Pius soils, 2 to 8 percent slopes, severely eroded
- 40 - Seminole-Gowton complex, 0 to 12 percent slopes
- 43 - Stephenville fine sandy loam, 3 to 5 percent slopes
- 44 - Stephenville-Carmel complex, 3 to 12 percent slopes
- 45 - Stephenville-Carmel complex, 3 to 12 percent slopes, severely eroded
- W - Water



**Figure 3. Soils Map**





**Bureau of Indian Affairs  
Eastern Oklahoma Region**

Snake Creek Road,  
CT-G10T-90923  
Seminole County

**Legend**

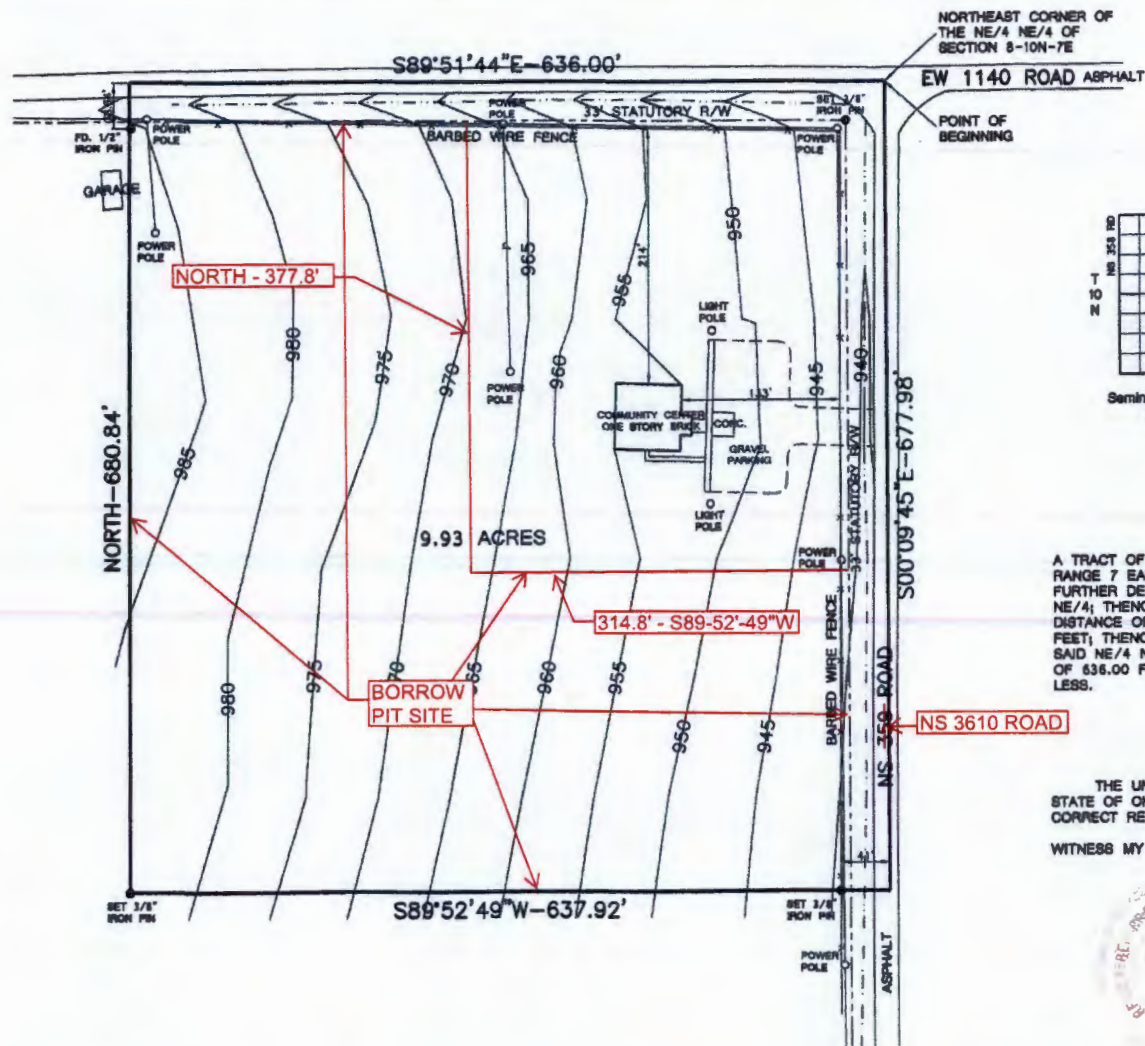
 Construction Corridor

0 0.5 1 Miles



**Figure 4. Topographic Map**





#### LEGAL DESCRIPTION

A TRACT OF LAND LYING IN THE NE/4 NE/4 OF SECTION 8, TOWNSHIP 10 NORTH, RANGE 7 EAST OF THE INDIAN MERIDIAN, SEMINOLE COUNTY, OKLAHOMA, AND FURTHER DESCRIBED AS BEGINNING AT THE NORTHEAST CORNER OF SAID NE/4 NE/4; THENCE 800°09'45"E ALONG THE EAST LINE OF SAID NE/4 NE/4 FOR A DISTANCE OF 677.98 FEET; THENCE S89°52'49"W FOR A DISTANCE OF 637.92 FEET; THENCE NORTH FOR A DISTANCE OF 680.84 FEET TO THE NORTH LINE OF SAID NE/4 NE/4; THENCE S89°51'44"E ALONG SAID NORTH LINE FOR A DISTANCE OF 636.00 FEET TO THE POINT OF BEGINNING, CONTAINING 9.93 ACRES MORE OR LESS.

#### CERTIFICATE

THE UNDERSIGNED, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF OKLAHOMA, DOES HEREBY CERTIFY THAT THIS PLAT IS A TRUE AND CORRECT REPRESENTATION OF THE SURVEY OF THE ABOVE DESCRIBED PROPERTY.

WITNESS MY HAND AND SEAL THIS 5TH DAY OF APRIL, 2011.



*David L. Washington*  
DAVID L. WASHINGTON  
PROFESSIONAL LAND SURVEYOR

THIS PLAT OF SURVEY MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS

WASHINGTON LAND SURVEYING, PLLC  
2307 MAPLE RIDGE AVE.  
OKMULOGEE, OKLAHOMA 74447  
PH 918-636-1636 FAX 918-758-0009  
C.A. NO. 3644

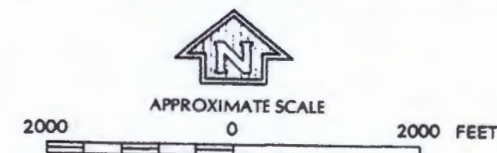
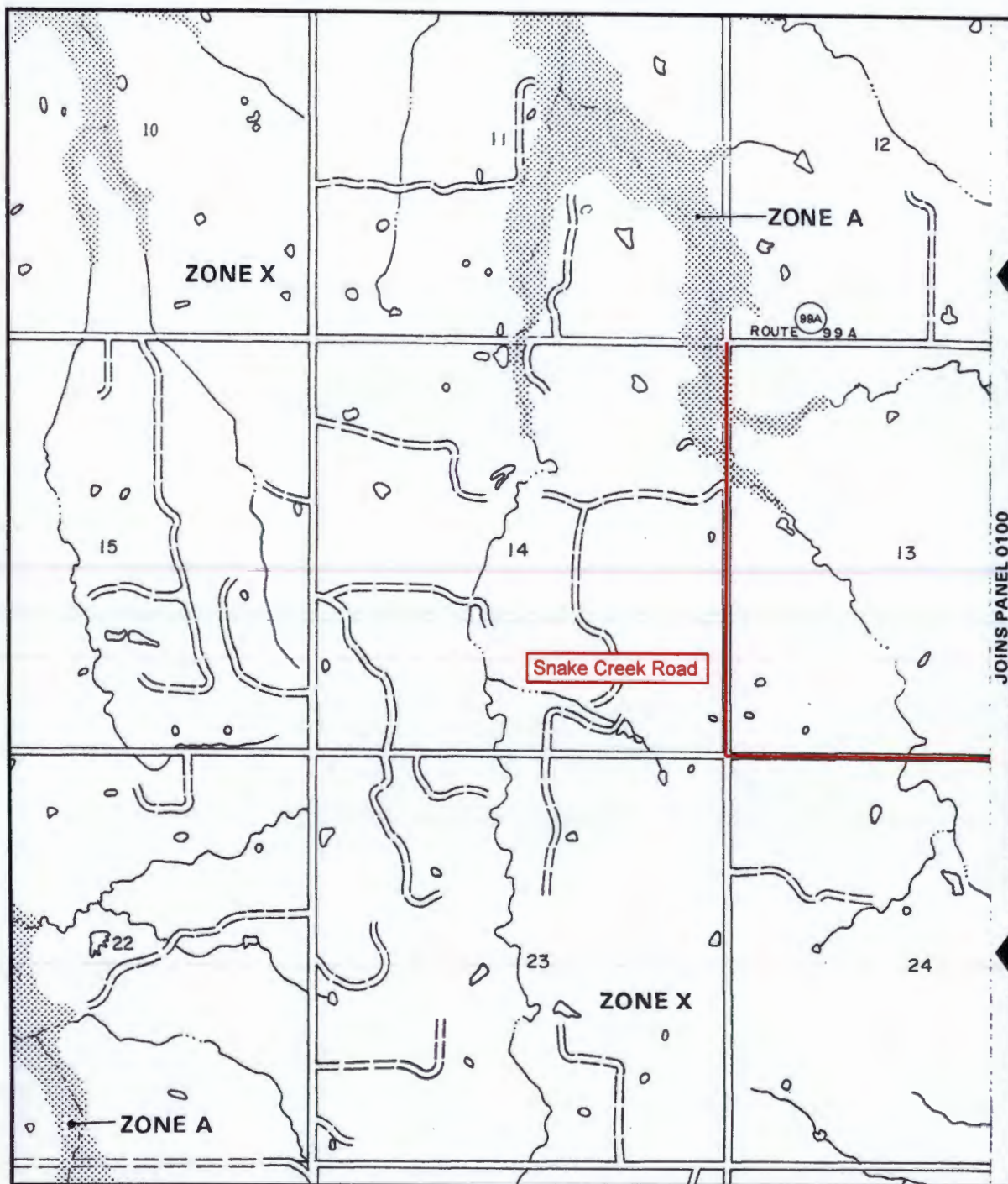
REV. NO.	DESCRIPTION	BY	DATE

PLAT OF SURVEY-STROTHER SITE  
SEMINOLE NATION OF OKLAHOMA

DESIGN	DRAWN	CHECKED
DATE	DATE 4/2/11	DATE 4/8/11

SCALE	1"=100'
JOB NO.	11004
BOOK NO.	
PRINC. SURV. NO. STROTHER	
SHEET NO.	1 OF 1





# NATIONAL FLOOD INSURANCE PROGRAM

## **FIRM** FLOOD INSURANCE RATE MAP

SEMINOLE COUNTY,  
OKLAHOMA AND  
INCORPORATED AREAS

PANEL 75 OF 250

(SEE MAP INDEX FOR PANELS NOT PRINTED)

### CONTAINS:

#### COMMUNITY

SEMINOLE, CITY OF  
UNINCORPORATED AREAS

#### NUMBER

400192  
400497

#### PANEL

0075  
0075

#### SUFFIX

C  
C



PANEL LOCATION

**MAP NUMBER**  
40133C0075 C

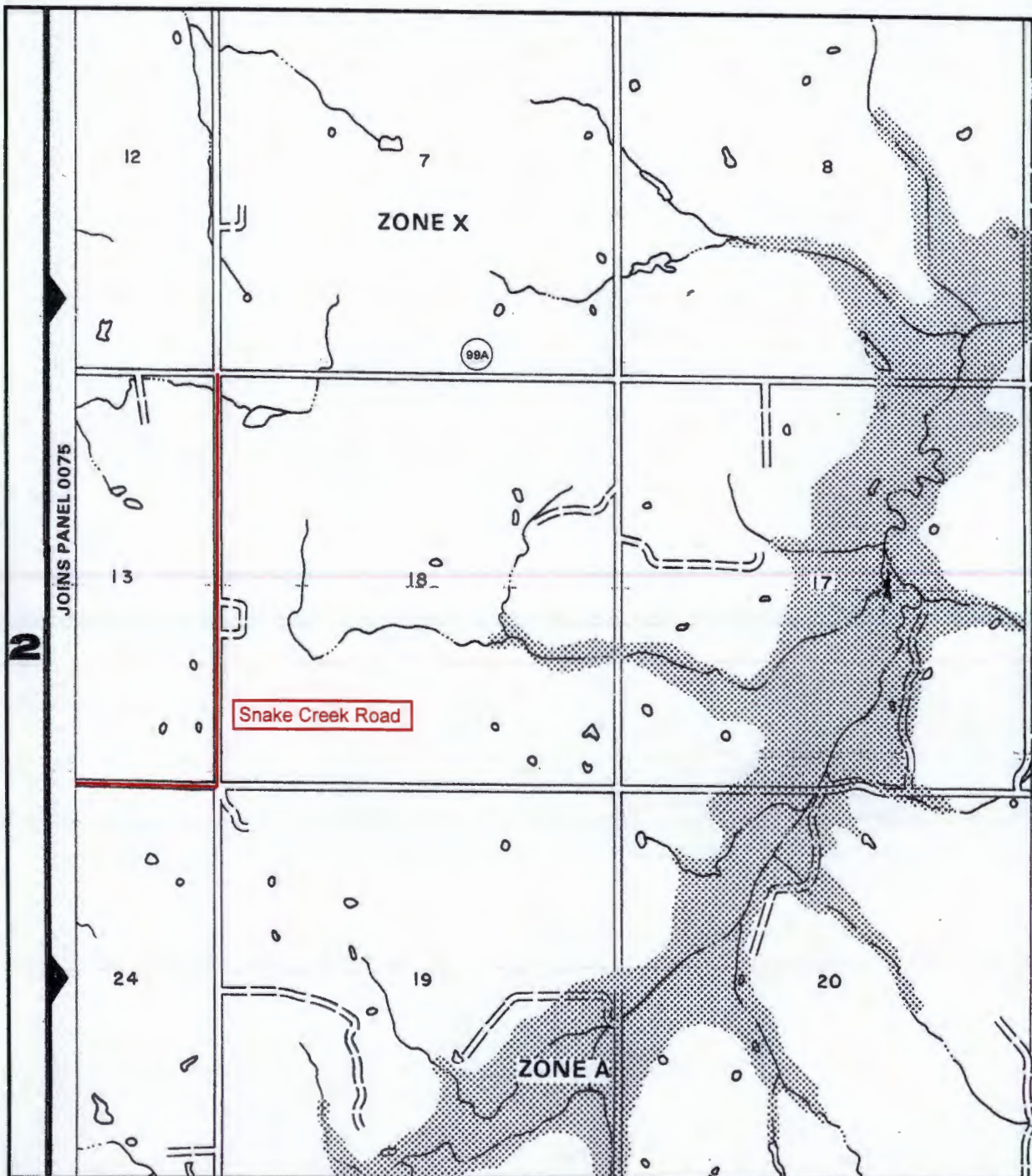
**EFFECTIVE DATE:**  
FEBRUARY 16, 1990



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)





Insurance agent or call the National Flood Insurance Program at (800) 636-6620.



APPROXIMATE SCALE

2000 0 2000 FEET

# NATIONAL FLOOD INSURANCE PROGRAM

## **FIRM** FLOOD INSURANCE RATE MAP SEMINOLE COUNTY, OKLAHOMA AND INCORPORATED AREAS

PANEL 100 OF 250

(SEE MAP INDEX FOR PANELS NOT PRINTED)

### CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CROWWELL TOWN OF	400282	0100	C
UNINCORPORATED AREAS	400497	0100	C



PANEL LOCATION

**MAP NUMBER**  
40133C0100 C

**EFFECTIVE DATE:**  
FEBRUARY 16, 1990



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)





Photograph 1. Station 62+74.70; centerline of NS-358 Road; facing south.





**Photograph 2.** Station 205+00; centerline of NS-359 Road; facing north.





**Photograph 3.** Station 252+80.24; centerline of NS-359 Road; facing south.





Photograph 4. Station 54+37.21; reinforced concrete box cross drain; facing west.





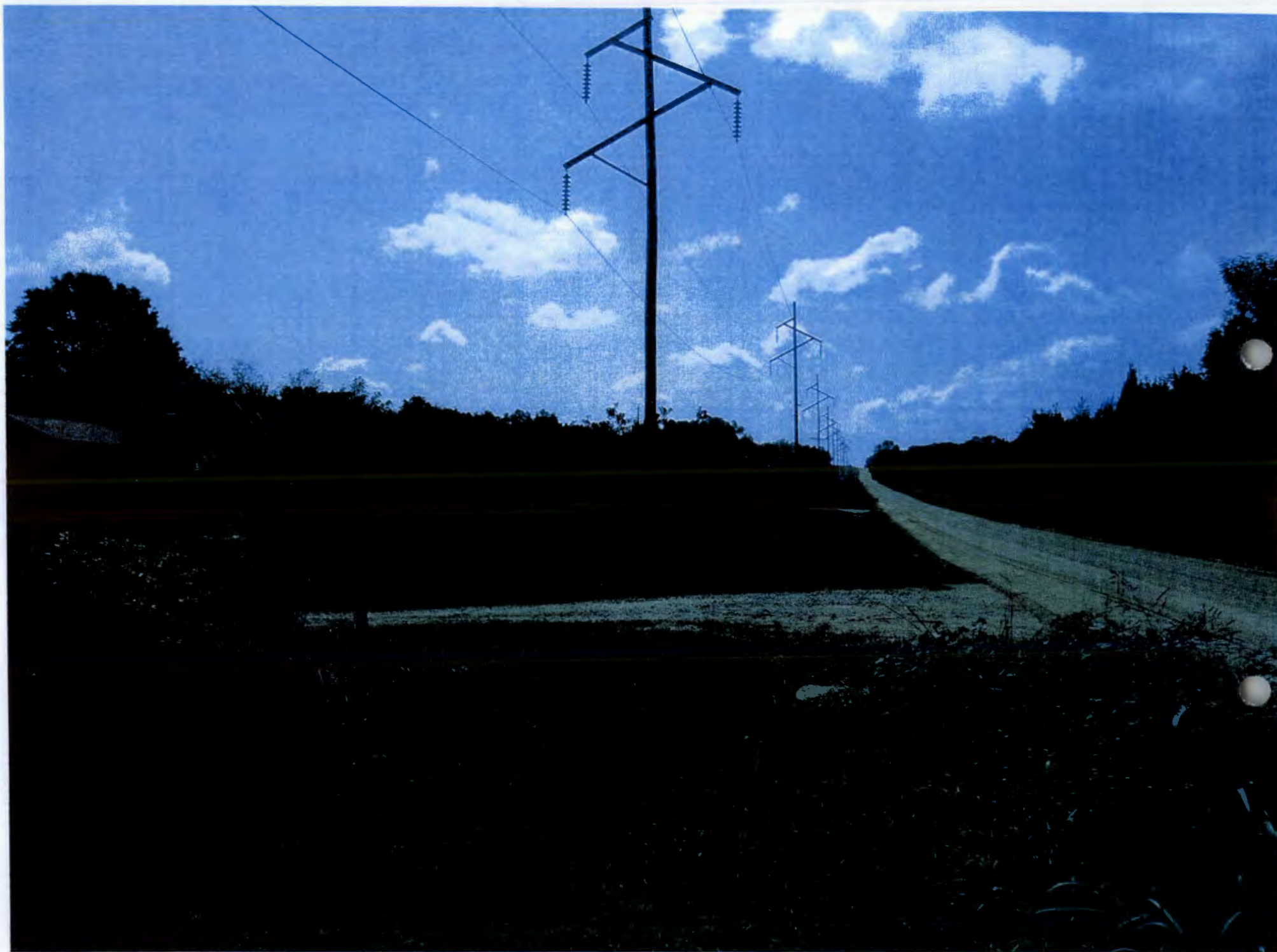
**Photograph 5.** Station 54+37.21; reinforced concrete box cross drain and nearby residence; facing west.





**Photograph 6.** Station 225+00; side ditch and Snake Creek Cemetery; facing north.





**Photograph 7.** Station 29+00; side ditch and nearby residence; facing south.





Photograph 8. Station 220+00; Snake Creek Church; facing east.



**APPENDIX B**

**ENDANGERED SPECIES ACT DOCUMENTATION**



## **Daniels, Benjamin**

---

**From:** Haikey, Larry  
**Sent:** Tuesday, January 03, 2012 7:51 AM  
**To:** Daniels, Benjamin  
**Subject:** FW: Validation of ABB survey done in Seminole County

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**Categories:** High Priority

Larry D. Haikey  
Regional Archeologist  
Division of Environmental, Safety and  
Cultural Resources Management  
Eastern Oklahoma Region  
P.O. Box 8002  
Muskogee, Oklahoma 74402  
Phone: 918-781-4660 Fax: 918-781-4667

---

**From:** Chris Cutler [<mailto:ccutler@seminolenation.com>]  
**Sent:** Thursday, December 22, 2011 9:36 AM  
**To:** Haikey, Larry; Polk, Jonna  
**Cc:** 'Derek'; Streater, Eddle  
**Subject:** FW: Validation of ABB survey done in Seminole County

Larry,

Here is the validation by the U.S. Fish and Wildlife Services of the American burying beetle survey and results we obtained related to the Snake Creek Roadway Improvement Project.

Chris D. Cutler, P.E.  
DIRECTOR  
Transportation Department  
Phone: 405-257-7294  
FAX: 405-257-7297  
Cell: 405-584-1148

---

**From:** Schnell, Gary D. [<mailto:gschnell@ou.edu>]  
**Sent:** Monday, December 19, 2011 2:07 PM  
**To:** Chris Cutler ([ccutler@seminolenation.com](mailto:ccutler@seminolenation.com))  
**Subject:** FW: Validation of ABB survey done in Seminole County

Chris,

Here is the validation by the U.S. Fish and Wildlife Services of the American burying beetle survey and results we obtained related to the Snake Creek Roadway Improvement Project. Please let me know if any additional information or action by me is needed.

Best wishes and season's greetings, Gary

Gary D. Schnell, Curator of Birds & Professor of Zoology  
Sam Noble Oklahoma Museum of Natural History  
2401 Chautauqua Avenue

**From:** [Chris Tanner@fws.gov](mailto:Chris_Tanner@fws.gov) [mailto:[Chris\\_Tanner@fws.gov](mailto:Chris_Tanner@fws.gov)]  
**Sent:** Monday, December 19, 2011 1:34 PM  
**To:** Schnell, Gary D.  
**Subject:** RE: Validation of ABB survey done in Seminole County

The U.S. Fish and Wildlife Service (Service) has reviewed the following American burying beetle (ABB) survey report:  
Seminole County, Oklahoma regarding the Snake Creek Roadway Improvement Project for the Seminole Nation ending September 20, 2011.

This American burying beetle (ABB) survey report indicates that no ABBs were captured at the proposed project site. This survey is valid until May 20, 2012. Since the survey results are negative, and we have reviewed and approved the survey report, no further section 7 consultation with the Service concerning the ABB is required. This response does not pertain to any other federally-listed species that may be impacted by the proposed project.

This notice needs to be forwarded to the appropriate project proponent, and appropriate federal, state, or tribal agency for their records. As the permittee and hired consultant this is your responsibility. Further, I may not have the contact information for the project proponents, or the appropriate state, federal, or tribal agency.

Our comments are submitted in accordance with section 7 of the Endangered Species Act (ESA). This correspondence is valid for one year from the above date. If you have any questions, please let me know.

Thank you.

Christopher D. Tanner  
Fish & Wildlife Biologist  
U.S. Fish and Wildlife Services  
Oklahoma Ecological Services Field Office  
9014 E. 21st Street  
Tulsa, OK 74129

Phone: (918) 382-4517  
Fax: (918) 581-7467  
Email: [Chris\\_Tanner@fws.gov](mailto:Chris_Tanner@fws.gov)



**Report to:**

**Chris Cutler  
Transportation Director  
Seminole Nation of Oklahoma  
P.O. Box 1498  
Wewoka, Oklahoma 74884**

**Presence/Absence Survey for American Burying Beetles for Snake Creek  
Roadway, Seminole County, Oklahoma  
BIA Project No. CT G10T-90923**

**Submitted by:**

**Gary D. Schrell and Victoria L. Smyth**

**University of Oklahoma  
Sam Noble Oklahoma Museum of Natural History  
2401 Chautauqua  
Norman, Oklahoma 73072**

**15 November 2011**

## *Presence/Absence Survey for American Burying Beetles, in Seminole County, OK*

### **Introduction**

The American burying beetle (*Nicrophorus americanus*) is listed as an endangered species and is known to occur in Seminole County, Oklahoma. The U.S. Fish and Wildlife Service determined that, pursuant to Section 7 of the Endangered Species Act, American burying beetles are to be surveyed at sites where construction or other ground-disturbing activities are planned to take place during the beetle's active period.

Traps are to be set in the area to be disturbed for five nights and prior to the start of construction. With one transect per 0.5 mile. If 0.5 inches of rain occurs between 7:00 pm and 7:00 am or if the temperature drops below 60°F during that survey night, an additional night of survey is required. Also, if 6 to 8 traps are disturbed in a transect over the five-night survey period, one additional night of survey is required for that transect; if 9 to 16 traps are disturbed, two additional survey nights are required for that transect; if 17 to 24 traps are disturbed, three additional nights are required for that transect. Any American burying beetles captured are to be noted on a standardized U. S. Fish and Wildlife Service data sheet.

The location to be surveyed (map in Appendix 1) had the following characteristics: Seminole County, improvements within Section 8, of T10N R7E, approximately one mile east and a quarter mile north of Strothers, OK, and Section 13, of T10 R6E, approximately one mile south of Strothers, OK. The project footprint is approximately 3 miles in length and also includes a barrow pit located in Section 8 described above.

### **Methods**

A presence/absence survey was conducted. Four transects were established at the site of the proposed Snake Creek Roadway Project in Seminole County (see map, Appendix 1). The trapping session lasted for 21 nights (10 September through 1 October 2011).

Trapping methods were those prescribed by the U.S. Fish and Wildlife Service in "American Burying Beetle *Nicrophorus americanus* Survey Guidance for Oklahoma" (updated 20 April 2011). Eight 32-ounce pitfall traps with soil and a sponge in the bottom of each trap were set on each transect. Each trap was baited with well-aged chicken and covered with a plastic dome (with ample openings on the edges) to protect any captured beetles from rainfall. The plastic dome was staked to the ground. Traps were checked before 9:00 am to minimize the possibility of beetle mortality due to heat.

Any American burying beetles and all other *Nicrophorus* beetles were to be noted on a standardized U.S. Fish and Wildlife Service survey form. High and low temperatures for the days of the surveys also were recorded. Copies of the original data forms are found in Appendix 2. Latitudes and longitudes for each site were as follows: (1) N35.36198/W096.58363; (2) N35.34278/W096.61813; (3) N35.33368/W096.63558; (4) N35.34557/W096.63579.



## *Presence/Absence Survey for American Burying Beetles, in Seminole County, OK*

### **Results**

Temperatures ranged from a low of 42°F to a high of 105°F, which included temperatures in the range of temperatures at which American burying beetles are active. The temperature dropped below 60°F 17 of the 21 trap nights, leaving only 4 trap nights that strictly met trapping criteria. No significant rainfall occurred during the survey (see Mesonet data for the time period, Appendix 3). No American burying beetles were captured (Table 1). With respect to other *Nicrophorus* species, we captured 11 *N. oribicollis*, 3 *N. tomentosus*, 5 *N. marginatus* and 15 *N. carolinus*.

### **Discussion**

We had unusual weather during the first two-thirds of September with unseasonably low temperatures at night. Temperatures at night fell slightly below 60°F on a number of nights. Given this situation, we extended our trapping period from 5 to 21 nights. While only four of these trap nights strictly met the trapping criteria set out by the U.S Fish and Wildlife Service, we are confident on a professional level that our 21 nights of trapping adequately sampled for American burying beetles. These trapping efforts did result in the capture of other species of burying beetles (genus *Nicrophorus*), indicating that burying beetles were active in the period during which we trapped.

In the past, American burying beetles have been recorded in Seminole County, which is on the far western edge of the current distribution of the species in Oklahoma. We conclude, based on extended sampling, that the location surveyed does not support American burying beetles at this time.

### **Literature Cited**

Division of Ecological Services. 2011. American burying beetle *Nicrophorus americanus* Survey Guidance for Oklahoma. U.S. Fish and Wildlife Service, Tulsa, Oklahoma.

*Presence/Absence Survey for American Burying Beetles, in Seminole County, OK*

Table 1. Results of beetle surveys at location of proposed Snake Creek Roadway project. Four numbers for each date and each species indicate number of *Nicrophorus* species captured at sites 1, 2, 3, and 4, respectively.

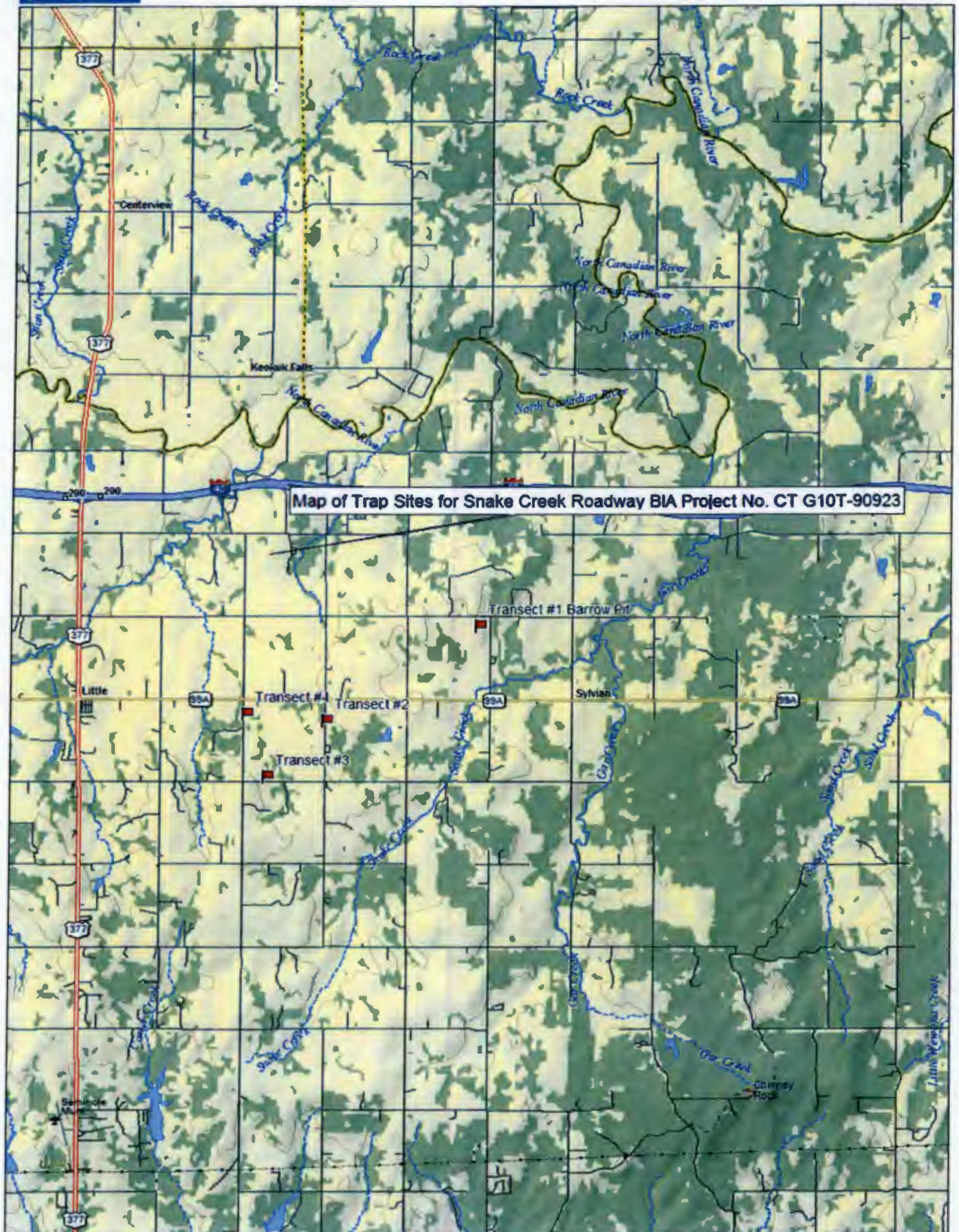
Date	<i>americanus</i>	<i>orbicollis</i>	<i>tomentosus</i>	<i>marginatus</i>	<i>carolinus</i>
11 Sep	0,0,0,0	0,0,0,0	0,0,0,0	0,0,1,0	0,1,0,0
12 Sep	0,0,0,0	0,2,1,1	1,0,0,0	0,0,0,0	0,1,0,0
13 Sep	0,0,0,0	0,1,0,0	0,0,0,0	0,0,0,0	0,1,0,0
14 Sep	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,1
15 Sep	0,0,0,0	1,0,0,0	0,0,0,0	0,0,0,0	0,2,0,0
16 Sep	0,0,0,0	1,0,0,0	0,0,0,0	0,0,0,0	0,1,0,0
17 Sep	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0
18 Sep	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0
19 Sep	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	2,0,0,0
20 Sep	0,0,0,0	1,0,0,0	0,0,0,0	0,0,0,0	1,0,0,0
21 Sep	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0
22 Sep	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	1,0,0,0
23 Sep	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0
24 Sep	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0
25 Sep	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0
26 Sep	0,0,0,0	0,0,0,1	0,0,0,1	0,0,0,0	1,0,0,1
27 Sep	0,0,0,0	0,0,0,0	0,0,0,0	2,0,0,0	0,0,0,0
28 Sep	0,0,0,0	2,0,0,0	1,0,0,0	0,0,0,0	0,1,0,0
29 Sep	0,0,0,0	0,0,0,0	0,0,0,0	1,0,0,0	0,0,0,0
30 Sep	0,0,0,0	0,0,0,0	0,0,0,0	1,0,0,0	1,0,0,0
1 Oct	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0	0,0,0,0



*Presence/Absence Survey for American Burying Beetles, in Seminole County, OK*

**Appendix 1**

**Map of Trap Sites for  
Snake Creek Roadway Project  
Seminole County**



Data use subject to license

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## **APPENDIX C**

### **NATIONAL HISTORIC PRESERVATION ACT DOCUMENTATION**



recei  
10/24/11

**Oklahoma Historical Society**  
**State Historic Preservation Office**

*Founded May 27, 1893*

Oklahoma History Center • 800 Nazih Zuhdi Drive • Oklahoma City, OK 73105-7914  
(405) 521-6249 • Fax (405) 522-0816 • [www.okhistory.org/shpo/shpom.htm](http://www.okhistory.org/shpo/shpom.htm)

October 19, 2011

Ms. Jonna Polk  
BIA Division of Environmental, Safety & Cultural Resources  
P.O. Box 8002  
Muskogee, OK 74402-8002

RE: File #0029-12; BIA Project for Snake Creek Road Borrow Pit & Five WPA Culverts (C-1, C-2, C-3, C-4 & C-5)

Dear Ms. Polk:

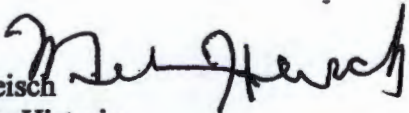
We have received and reviewed the documentation concerning the referenced project in Seminole County. Additionally, we have examined the information contained in the Oklahoma Landmarks Inventory (OLI) files and other materials on historic resources available in our office. We find that there are no historic properties affected by the referenced project.

Thank you for the opportunity to comment on this project. We look forward to working with you in the future.

If you have any questions, please contact Timothy G. Baugh, Ph.D., Historical Archaeologist, at 405/521-6381.

Should further correspondence pertaining to this project be necessary, please reference the above underlined file number. Thank you.

Sincerely,

  
Melvena Heisch  
Deputy State Historic  
Preservation Officer

MH:jr





## *Oklahoma Archeological Survey*

THE UNIVERSITY OF OKLAHOMA

October 6, 2011

Larry Halkey  
Archeologist  
Bureau of Indian Affairs  
Eastern Oklahoma Regional Office  
P. O. Box 8002  
Muskogee, OK 74402-8002

Re: Proposed Snake Creek Road borrow pit and road improvements.  
Legal Description: NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  NE  $\frac{1}{4}$  Section 8 and West edge  
Section 13 T10N R6E, Seminole County, Oklahoma.

Dear Mr. Halkey:

I have received a report documenting the results of a cultural resources survey for the above referenced action. You performed this fieldwork on July 19-20, 2011. The examination of some 15 acres representing the area of potential effect resulted in the identification of four WPA-era culverts and one WPA-era bridge. **I defer opinion on the potential eligibility of the four culverts and one bridge as well as project effect to the Historic Archaeologist with the State Historic Preservation Office.**

This review has been conducted in cooperation with the State Historic Preservation Office, Oklahoma Historical Society. You must also have a letter from that office to document your consultation pursuant to Section 106 of the National Historic Preservation Act.

Sincerely,

Robert L. Brooks  
State Archaeologist

Cc: SHPO



**Daniels, Benjamin**

---

**From:** Haikey, Larry  
**Sent:** Thursday, January 05, 2012 2:35 PM  
**To:** Chris Cutler  
**Cc:** Daniels, Benjamin; Polk, Jonna  
**Subject:** RE: Snake Creek Assurance

Thanks. I think I can go with this.

Larry D. Haikey  
Regional Archeologist  
Division of Environmental, Safety and  
Cultural Resources Management  
Eastern Oklahoma Region  
P.O. Box 8002  
Muskogee, Oklahoma 74402  
Phone: 918-781-4660 Fax: 918-781-4667

---

**From:** Chris Cutler [<mailto:ccutler@seminolenation.com>]  
**Sent:** Thursday, January 05, 2012 2:16 PM  
**To:** Haikey, Larry  
**Cc:** 'Derek'; 'Natalie Deere'  
**Subject:** Snake Creek Assurance

Larry,

As requested in our phone discussion of yesterday, the Snake Creek cemetery will be labeled on the plans as an environmentally sensitive area (ESA) and a statement that "areas in front of the ESAs shall be worked with hand tools and small mechanical equipment" as well as the Historical Preservation Officer will be involved in the construction around these areas. This requirement will be reinforced during the pre-construction meeting with the successful contractor.

I hope this satisfies you for an assurance for the Environmental Assessment.

Sincerely,

Chris D. Cutler, P.E.  
DIRECTOR  
Transportation Department  
Phone: 405-257-7294  
FAX: 405-257-7297  
Cell: 405-584-1148





## Oklahoma Historical Society

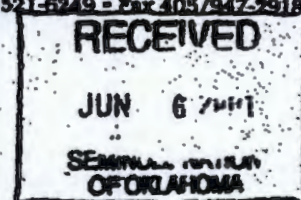
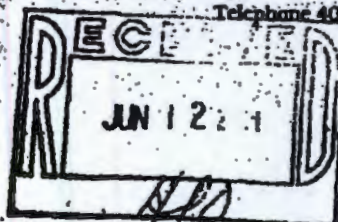
Founded May 27, 1893

State Historic Preservation Office • 2704 Villa Prom • Shepherd Mall • Oklahoma City, OK 73107-2441

Telephone 405/521-6249 • Fax 405/947-2918

June 5, 2001

Ms. Eaman Spain  
Seminole Nation of Oklahoma  
P.O. Box 1498  
Wewoka, OK 74884



RE: File #1816-01; Proposed Roads Project #1 (Snake Creek) & #2  
(Mekusukey Ext.)

Dear Ms. Spain:

We have received and reviewed the documentation submitted on the referenced project in Seminole County. Additionally, we have examined the information contained in the Oklahoma Landmarks Inventory (OLI) files and other materials on historic resources available in our office.

In addition to our review, you must contact the Oklahoma Archeological Survey (OAS), 111 E. Chesapeake, #102, Norman OK 73019-5111 (#405/325-7211, FAX #405/325-7604), to obtain a determination about the presence of prehistoric resources that may be eligible for the National Register of Historic Places. Should the OAS conclude that there are no archeological sites or other types of historic properties, as defined in 36 CFR Part 800.16(1), which are eligible for inclusion in the National Register of Historic Places within the project area and that such sites are unlikely to occur, we find that there are no historic properties affected within the referenced project's area of potential effect.

The OAS may conclude that an on-site investigation of all or part of the project impact area is necessary to determine the presence of archeological resources. In the event that such an investigation reveals the presence of archeological sites, we will defer to the judgment of the OAS concerning whether or not any of the resources should be considered "historic properties" under the Section 106 review process.

NOTE: When submitting future projects, please provide your return-address.

Should further correspondence pertaining to this project be necessary, the above underlined file number must be referenced. If you have any questions, please contact Charles Wallis, RPA, Historical Archeologist, at 405/521-6381. Thank you.

Sincerely,

Melvena Haisch  
Deputy State Historic  
Preservation Officer

MH:pm





## Oklahoma Archeological Survey

THE UNIVERSITY OF OKLAHOMA

May 11, 2001

Emman Spain  
Seminole Nation of Oklahoma  
PO Box 1498  
Wewoka, OK 74884

RE: Seminole Nation of Oklahoma Road Improvement Program proposed widening of road and ditch ROW 30 ft. from center of the road on each side; Snake Creek, BIA Project No. CTG10T 909 23. Legal Description: Section 13 T10N R6E; Seminole County, Oklahoma.

Dear Mr. Spain:

The above referenced project has been reviewed by the Community Assistance Program staff of this agency to identify potential areas that may contain prehistoric or historic archaeological materials (historic properties). The location of your project has been cross-checked with the state site files containing approximately 14,000 archaeological sites which are currently recorded for the state of Oklahoma. Site(s) are listed in your project area (1898 GLO Structure, SM-60 - Cemetery w/ unknown boundaries), and based on the topographic and hydrologic setting of your project, archaeological materials are likely to be encountered. An archaeological field inspection is therefore considered necessary prior to project construction in order to identify significant archaeological resources that may exist in your area. Please contact this office at (405) 325-7211 if you require additional information on this project.

This environmental review and evaluation is performed in order to locate, record, and preserve Oklahoma's prehistoric and historic cultural heritage in cooperation with the State Historic Preservation Office, Oklahoma Historical Society. In addition to our review comments, under 36CFR Part 800.3 you are reminded of your responsibility to consult with the appropriate Native American tribe/groups to identify any concerns they may have pertaining to this undertaking and potential impacts to properties of traditional and/or ceremonial value. Thank you for your cooperation.

Sincerely,

Vicki Wodel  
Staff Archaeologist

Robert L. Brooks  
State Archaeologist

ed

cc: SHPO  
Ben Barnette



**APPENDIX D**  
**OTHER CONSULTATION RESPONSES**

# Seminole Nation of Oklahoma

POST OFFICE BOX 1498  
WEWOKA, OKLAHOMA 74884

## EXECUTIVE DEPARTMENT

Enoch Kelly Haney, Principal Chief  
Larry Harrison, Assistant Chief  
Phone: (405) 257-7200  
Fax: (405) 257-7209

February 1, 2008

Ms. Jeanette Hanna  
Regional Director  
Bureau of Indian Affairs  
Eastern Oklahoma Region  
P.O. Box 8002  
Muskogee, OK 74402-8002

Attn: Mr. Bob Coleman

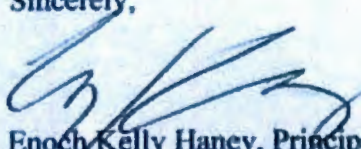
Dear Mr. Coleman,

Re: The 3.0 mile project located in sections 13, 14, 23, 24 of Township 10 North, Range 6 East and sections 18 and 19 of Township 10 North, Range 7 East.

In response to your inquiry dated January 25, 2008, regarding County Road EW-100, we are not aware of any Seminole Nation of Oklahoma potential social, economic or environmental sites located in the project area.

If you have any questions, please contact Mr. Chris Cutler, our Transportation Director, at (405) 257-7294.

Sincerely,

  
Enoch Kelly Haney, Principal Chief  
Seminole Nation of Oklahoma

Cc: HPO Officer, Seminole Nation  
Eddie Streater, Superintendent, Bureau of Indian Affairs, Wewoka Agency

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2008 FEB -4 A 10 31  
BIA-EDRO  
REGIONAL DIRECTORS OFFICE





DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, TULSA DISTRICT  
1645 SOUTH 101ST EAST AVENUE  
TULSA, OKLAHOMA 74128-4609

April 23, 2008

Regulatory Office

Ms. Jeanette Hanna  
Regional Director  
US Department of the Interior  
Bureau of Indian Affairs  
Post Office Box 8002  
Muskogee, OK 74402-8002

Dear Mr. Hanna:

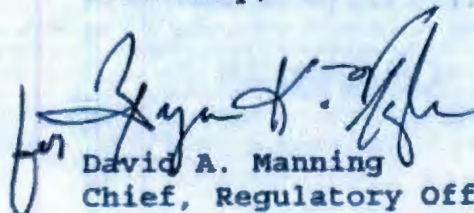
Please reference your letter of January 30, 2008, regarding the proposed Snake Creek Road improvements project. The proposed project is located within sections 13, 14, 23, and 24, Township 10 North, Range 6 east and within Sections 18 and 19, Township 10 North, Range 7 East, Seminole County, Oklahoma.

The provided information does not indicate that a placement of dredged or fill material will be required, permanently or temporarily, into any "waters of the United States," including jurisdictional wetlands. Therefore, your proposal is not subject to regulation pursuant to Section 404 of the Clean Water Act, and a Department of the Army (DA) permit will not be required. Should your method of construction necessitate such a discharge (i.e., impacts to any potentially jurisdictional waterway and/or wetland areas), we suggest that you resubmit that portion of your project so that we may determine whether an individual DA permit will be required.

Although DA authorization is not required, this does not preclude the possibility that other Federal, State, or local permits may be required.

Your project has been assigned Identification Number 2008-63. Please refer to this number during future correspondence. If further assistance is required, contact Mr. Bryan K. Taylor at 918-669-4950.

Sincerely,

  
David A. Manning  
Chief, Regulatory Office





STEVEN A. THOMPSON  
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

BRAD HENRY  
Governor

February 4, 2008

Ms. Jeanette Hanna  
Regional Director  
Bureau of Indian Affairs  
Eastern Oklahoma region  
P.O. Box 8002  
Muskogee, OK 74402-8002

REGIONAL DIRECTORS OFFICE  
BIA-FORD

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Dear Ms. Hanna:

RE: Proposed Snake Creek Road Improvement Project - Seminole County, OK

We have completed a preliminary general review of the above referenced project. At this time, we have no objections regarding this project, however we do want to emphasize two areas of Statewide environmental concern:

- a) Prior to beginning any construction project, a determination should be made as to whether an Oklahoma Pollutant Discharge Elimination System (OPDES) permit for the storm water runoff is required during the construction phase of that project.
- b) Oklahoma is currently in attainment with Federal Air Quality Regulations; therefore, during any construction, reasonable precautions must be taken to protect air quality by minimizing fugitive dust emissions.

If you have any questions or need clarification, please do not hesitate to contact me at 405/702-1019 or 1/800-869-1400.

Sincerely,

Margaret M. Graham  
Environmental Review Coordinator  
CUSTOMER ASSISTANCE PROGRAM





**OKLAHOMA WATER RESOURCES BOARD**  
Planning & Management Division  
Oklahoma City, OK

**PUBLIC NOTICE REVIEW**

☐ We have no comments to offer.      ☒ We offer the following comments.

**WE RECOMMEND THAT YOU CONTACT THE LOCAL FLOODPLAIN ADMINISTRATOR FOR POSSIBLE PERMIT REQUIREMENTS FOR THIS PROJECT.** THE OWRB WEB SITE, [www.owrb.state.ok.us](http://www.owrb.state.ok.us), contains a directory of floodplain administrators and is located under forms/floodplain management/floodplain administrators, listed alphabetically by name of community. If this development would fall on state owned or operated property, a floodplain development permit is required from OWRB. The Chapter 55 Rules and permit application for this requirement can be found on the OWRB web site listed above. If this project is proposed in a non-participating community, try to ensure that this project is completed so that it is reasonably safe from flooding and so that it does not flood adjacent property if at all possible.

**Reviewer:** Floodplain Assistant – Cathy Poage      **DATE** 02/04/2008

**Project Name:** Proposed Road Improvement Project for the Seminole Nation of OK, Located in Sections 13, 14, 23, & 24, Twp 10N, Rge 6EIM and Sections 18 & 19, Twp 10N, Rge 7EIM, Seminole County, OK

**FIRM Name:** US Dept of the Interior, Bureau of Indian Affairs, Ms. Jeanette Hanna

@ Seminole County participates in the NFIP and has a floodplain development permitting system.



DUANE'A SMITH  
EXECUTIVE DIRECTOR



BRAD HENRY  
GOVERNOR

STATE OF OKLAHOMA  
WATER RESOURCES BOARD  
www.owrb.ok.gov

REGIONAL DIRECTORS OFFICE  
BIA-EORO

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January 31, 2008

Jeanette Hanna, Regional Director  
Bureau of Indian Affairs  
Eastern Oklahoma Region  
P.O. Box 8002  
Muskogee, OK 74402-8002

Dear Ms. Hanna:

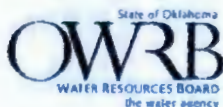
In response to your letter of January 25<sup>th</sup> soliciting input from environmental agencies on a road construction project being undertaken by the BIA, I have some points of concern that you will likely need to address prior to commencement of construction.

- I suggest you contact Aaron Findley, Seminole County Floodplain Administrator, (405-257-6479) or Gavin Brady in our Tulsa office (918-581-2924) to determine which parts of this project will require floodplain permits.
- Since the BIA is undertaking a project off Indian lands, I would also suggest you contact John Dyer at (405-521-3050) to determine if there are any ODOT concerns.
- It is often necessary to use stream water in these sorts of construction projects. If that is the case, I suggest you contact Bob Sandbo in our offices (405-530-8800) to begin the process of acquiring the necessary water rights and permits.
- We encourage the expeditious use of best management practices to avoid the introduction or release of materials into the adjacent environment that could then migrate into nearby surface or groundwater.

We appreciate the opportunity to review and comment on these projects. We look forward to working with you as necessary to resolve these issues. If you have any questions or need additional information, please feel free to contact Chuck Potts at (405) 530-8800 or [cpotts@owrb.ok.gov](mailto:cpotts@owrb.ok.gov).

Sincerely,

Derek Smithee, Chief  
Water Quality Programs Division



3800 N. CLASSEN BOULEVARD • OKLAHOMA CITY, OKLAHOMA 73118  
TELEPHONE (405) 530-8800 • FAX (405) 530-8900

Mark Nichols, Chairman • Rudy Hermann, Vice Chairman • F. Ford Drummond, Secretary  
Lorrie L. Farmer • Linda Lambert • Richard C. Sevenoaks • Jack Kestley • Ed Fite • Kenneth K. Knowles







BE TRULY YOURS TO

**United States Department of the Interior**  
**BUREAU OF INDIAN AFFAIRS**  
 Eastern Oklahoma Regional Office  
 P.O. Box 8002  
 Muskogee, OK 74402-8002



Division of Environmental,  
 Safety and Cultural Resources

JAN 25 2008

Mr. Ed Fite  
 Director  
 Oklahoma Scenic Rivers Commission  
 P.O. Box 292  
 Tahlequah, Oklahoma 74465-0292

Dear Mr. Fite:

The Bureau of Indian Affairs (BIA), Eastern Oklahoma Regional Office (EORO), is preparing an environmental assessment for the proposed Snake Creek Road improvement project in Seminole County, Oklahoma, for the Seminole Nation of Oklahoma. As part of the scoping process under the National Environmental Policy Act of 1969, as amended, the EORO is soliciting comments regarding the potential social, economic, and environmental impacts of the proposed action.

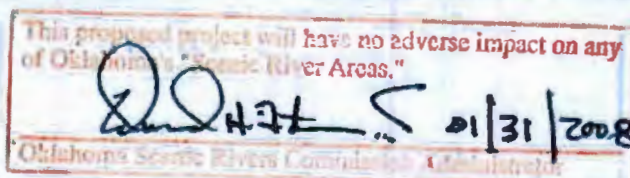
The 3.0 mile project is located in sections 13, 14, 23, and 24 of Township 10 North, Range 6 East and sections 18 and 19 of Township 10 North, Range 7 East. The road project begins approximately 2.0 miles east of U.S. Highway 377 at the intersection of State Highway 99A and NS-358. The project then extends south for 1.0 mile, continues east on EW-116 for 1.0 mile, proceeds north on NS-359 for 1.0 mile, and ends at the beginning point. An aerial map showing the project location is enclosed for your reference.

The development of alternatives was based on budget constraints and the BIA's obligation to meet the roadway design guidelines approved by the Federal Highway Administration, the Oklahoma Department of Transportation, and the American Association of State Highway and Transportation Officials.

The *No Action Alternative* would leave existing roads in their current condition with no grading, drainage or surfacing improvements. Road widths would remain 20 feet with an approximately 33 foot right-of-way (ROW) and road maintenance would continue to be provided by Seminole County, District 2.

The *Proposed Action Alternative* would consist of vertical realignment of the roadway and the road width would be increased to approximately 28 feet. Seminole County claims a legislative right-of-way of 33 feet in width; however, the County maintains the road and ditches out to the fence lines and assumes the right-of-way between the fences

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 BIA-EORO  
 REGIONAL DIRECTORS OFFICE





as a prescriptive right. Grading, drainage and surfacing improvements would be performed along the project's entire length. Seminole County would be responsible for all ROW acquisition, if required. The project, as designed, will not require the use of a borrow pit at this time. After construction, long-term road maintenance would be provided by Seminole County, District 2.

Please submit written comments within 30 days of the date of this letter to the following address: Ms. Jeanette Hanna, Regional Director, Bureau of Indian Affairs, Eastern Oklahoma Region, P.O. Box 8002, Muskogee, Oklahoma 74402-8002. If additional information concerning this action is required, please contact Mr. Bob Coleman, Division Chief, Division of Environmental, Safety, and Cultural Resources, EORO, at (918) 781-4660.

Respectfully,



Regional Director

Enclosures





*Oklahoma*  
*Natural Heritage Inventory*

OKLAHOMA BIOLOGICAL SURVEY  
111 E. Chesapeake Street  
Norman, Oklahoma 73019-5112, USA  
(405) 325-1985  
FAX: (405) 325-7702

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REGIONAL DIRECTORS OFFICE

Jeanette Hanna  
Bureau of Indian Affairs, Eastern Oklahoma Region  
P.O. Box 8002  
Muskogee, OK 74402-8002

OBS Ref: 2008-060-FED-BIA

January 31, 2008

Re: Division of Environmental, Safety and Cultural Resources; Snake Creek Road Improvement Project

Dear Ms. Hanna,

Regarding your request for information on the presence of endangered species or other elements of biological significance at the referenced site(s), we have reviewed the information currently in the Oklahoma Natural Heritage Inventory database and have found no record(s) of elements of concern at or near the location(s) you describe.

Because the ONHI database is only as complete as the information that has been collected, we cannot say with certainty whether or not a given site harbors rare species or ecological communities. For this reason, if you are concerned about species of federal interest, we urge you to consult with the Tulsa office of the U.S. Fish and Wildlife Service (918.581.7458), as they may have additional information of which we are unaware.

The information we provide to you is a product of a cooperative agreement between the Oklahoma Biological Survey (OBS) and the Oklahoma Department of Wildlife Conservation (ODWC). For more information about the likely environmental impacts of your project on state endangered species, please contact William Ray at ODWC (405-424-6062). You may also find our web site helpful for expediting your information request. See <http://www.biosurvey.ou.edu/fastforward.html>.

Sincerely,

*for Justin Woods*  
Jan Butler  
Biological Data Coordinator



## U.S. Department of Agriculture

## FARMLAND CONVERSION IMPACT RATING

<b>PART I (To be completed by Federal Agency)</b>		Date Of Land Evaluation Request 1/25/08			
Name Of Project Snake Creek Rd., Seminole County OK		Federal Agency Involved Bureau of Indian Affairs			
Proposed Land Use Road Improvement		County And State Muskogee, OK			
<b>PART II (To be completed by NRCS)</b>		Date Request Received By NRCS 1/31/08			
Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply -- do not complete additional parts of this form).		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Acres Irrigated 504	Average Farm Size 239
Major Crop(s) Winter Wheat	Farmable Land In Govt. Jurisdiction Acres: 133,734 % 33	Amount Of Farmland As Defined In FPPA Acres: 90,225 % 22			
Name Of Land Evaluation System Used CALES	Name Of Local Site Assessment System None	Date Land Evaluation Returned By NRCS 1/31/08			
<b>PART III (To be completed by Federal Agency)</b>		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly		20.0			
B. Total Acres To Be Converted Indirectly		0.0			
C. Total Acres In Site		20.0	0.0	0.0	0.0
<b>PART IV (To be completed by NRCS) Land Evaluation Information</b>					
A. Total Acres Prime And Unique Farmland		2.2	0.0	0.0	
B. Total Acres Statewide And Local Important Farmland		0.0			
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted		0.0			
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value		0.0			
<b>PART V (To be completed by NRCS) Land Evaluation Criterion</b>					
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)		75	0	0	0
<b>PART VI (To be completed by Federal Agency)</b>					
Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))	Maximum Points				
1. Area In Nonurban Use	15				
2. Perimeter In Nonurban Use	10				
3. Percent Of Site Being Farmed	20				
4. Protection Provided By State And Local Government	20				
5. Distance From Urban Builtup Area	0				
6. Distance To Urban Support Services	0				
7. Size Of Present Farm Unit Compared To Average	10				
8. Creation Of Nonfarmable Farmland	25				
9. Availability Of Farm Support Services	5				
10. On-Farm Investments	20				
11. Effects Of Conversion On Farm Support Services	25				
12. Compatibility With Existing Agricultural Use	10				
TOTAL SITE ASSESSMENT POINTS	160	0	0	0	0
<b>PART VII (To be completed by Federal Agency)</b>					
Relative Value Of Farmland (From Part V)	100	75	0	0	0
Total Site Assessment (From Part VI above or a local site assessment)	160	0	0	0	0
TOTAL POINTS (Total of above 2 lines)	260	75	0	0	0
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input type="checkbox"/>			
Reason For Selection:					



#### STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 - Federal agencies involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form.

Step 2 - Originator will send copies A, B and C together with maps indicating locations of site(s), to the Natural Resources Conservation Service (NRCS) local field office and retain copy D for their files. (Note: NRCS has a field office in most counties in the U.S. The field office is usually located in the county seat. A list of field office locations are available from the NRCS State Conservationist in each state).

Step 3 - NRCS will, within 45 calendar days after receipt of form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland.

Step 4 - In cases where farmland covered by the FPPA will be converted by the proposed project, NRCS field offices will complete Parts II, IV and V of the form.

Step 5 - NRCS will return copy A and B of the form to the Federal agency involved in the project. (Copy C will be retained for NRCS records).

Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form.

Step 7 - The Federal agency involved in the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA and the agency's internal policies.

#### INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

**Part I:** In completing the "County And State" questions list all the local governments that are responsible for local land controls where site(s) are to be evaluated.

**Part III:** In completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities) that will cause a direct conversion.

**Part VI:** Do not complete Part VI if a local site assessment is used.

Assign the maximum points for each site assessment criterion as shown in § 658.5 (b) of CFR. In cases of corridor-type projects such as transportation, powerline and flood control, criteria #5 and #6 will not apply and will be weighed zero, however, criterion #8 will be weighed a maximum of 25 points, and criterion #11 a maximum of 25 points.

Individual Federal agencies at the national level, may assign relative weights among the 12 site assessment criteria other than those shown in the FPPA rule. In all cases where other weights are assigned relative adjustments must be made to maintain the maximum total weight points at 160.

In rating alternative sites, Federal agencies shall consider each of the criteria and assign points within the limits established in the FPPA rule. Sites most suitable for protection under these criteria will receive the highest total scores, and sites least suitable, the lowest scores.

**Part VII:** In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, adjust the site assessment points to a base of 160. Example: if the Site Assessment maximum is 200 points, and alternative Site "A" is rated 180 points:

$$\text{Total points assigned Site A} = \frac{180}{200} \times 160 = 144 \text{ points for Site "A."}$$
$$\text{Maximum points possible} \quad 200$$





BD

**United States Department of the Interior**  
**BUREAU OF INDIAN AFFAIRS**  
Eastern Oklahoma Regional Office  
P.O. Box 8002  
Muskogee, OK 74402-8002

Division of Environmental,  
Safety and Cultural Resources

**JAN 25 2008**

Mr. Jvon James  
County Commissioner  
Seminole County, District 2  
110 S. Wewoka Ave., Suite 103  
Wewoka, Oklahoma 74884

Dear Mr. James:

The Bureau of Indian Affairs (BIA), Eastern Oklahoma Regional Office (EORO), is preparing an environmental assessment for the proposed Snake Creek Road improvement project in Seminole County, Oklahoma, for the Seminole Nation of Oklahoma. As part of the scoping process under the National Environmental Policy Act of 1969, as amended, the EORO is soliciting comments regarding the potential social, economic, and environmental impacts of the proposed action.

The 3.0 mile project is located in sections 13, 14, 23, and 24 of Township 10 North, Range 6 East and sections 18 and 19 of Township 10 North, Range 7 East. The road project begins approximately 2.0 miles east of U.S. Highway 377 at the intersection of State Highway 99A and NS-358. The project then extends south for 1.0 mile, continues east on EW-116 for 1.0 mile, proceeds north on NS-359 for 1.0 mile, and ends at the beginning point. An aerial map showing the project location is enclosed for your reference.

The development of alternatives was based on budget constraints and the BIA's obligation to meet the roadway design guidelines approved by the Federal Highway Administration, the Oklahoma Department of Transportation, and the American Association of State Highway and Transportation Officials.

The *No Action Alternative* would leave existing roads in their current condition with no grading, drainage or surfacing improvements. Road widths would remain 20 feet with an approximately 33 foot right-of-way (ROW) and road maintenance would continue to be provided by Seminole County, District 2.

The *Proposed Action Alternative* would consist of vertical realignment of the roadway and the road width would be increased to approximately 28 feet. Seminole County claims a legislative right-of-way of 33 feet in width; however, the County maintains the road and ditches out to the fence lines and assumes the right-of-way between the fences



as a prescriptive right. Grading, drainage and surfacing improvements would be performed along the project's entire length. Seminole County would be responsible for all ROW acquisition, if required. The project, as designed, will not require the use of a borrow pit at this time. After construction, long-term road maintenance would be provided by Seminole County, District 2.

Please submit written comments within 30 days of the date of this letter to the following address: Ms. Jeanette Hanna, Regional Director, Bureau of Indian Affairs, Eastern Oklahoma Region, P.O. Box 8002, Muskogee, Oklahoma 74402-8002. If additional information concerning this action is required, please contact Mr. Bob Coleman, Division Chief, Division of Environmental, Safety, and Cultural Resources, EORO, at (918) 781-4660.

Respectfully,



Regional Director

Enclosures

*NO Comment*



WILDLIFE CONSERVATION COMMISSION

M. David Riggs	Bruce Mabrey
CHAIRMAN	MEMBER
Harland Stonecipher	Mac Maguire
VICE CHAIRMAN	MEMBER
John D. Groendyke	Bill Phelps
SECRETARY	MEMBER
Mike Bloodworth	Mart Tisdal
MEMBER	MEMBER



BRAD HENRY, GOVERNOR  
GREG D. DUFFY, DIRECTOR

**DEPARTMENT OF WILDLIFE CONSERVATION**

P.O. Box 53465

Oklahoma City, OK 73152

PH. (405) 521-3851

February 29, 2008

Ms. Jeanette Hanna  
Regional Director  
Bureau of Indian Affairs  
East Oklahoma Region  
P.O. Box 8002  
Muskogee, Oklahoma 74402-8002

Re: EA for Snake Creek Road Improvement, Seminole County, Oklahoma

Dear Ms. Hanna,

The Oklahoma Department of Wildlife Conservation (ODWC) has received your letter concerning the proposed road improvement project on Snake Creek Road, in Seminole County, Oklahoma for the Seminole Nation of Oklahoma. The 3 mile project area is located in sections 13, 14, 23, and 24 of T10N R6E and sections 18 and 19 of T10N R7E. The road project begins approximately 2 miles east of Highway 377 at the intersection of State Highway 99A and NS-356. The project extends south for 1.0 mile, continues east on EW-116 for 1 mile, proceeds north on NS-359 for 1 mile, and ends at the beginning point.

Please understand that due to time and personnel constraints, the ODWC has not performed an actual field survey of the proposed site location. The information sent to this office regarding the proposed project has been reviewed and compared against our current records for endangered and threatened species. The ODWC concurs with the preferred alternative chosen in the assessment and believes this alternative will not have significant lasting negative impacts to state-listed threatened and/or endangered species or fish and wildlife resources of the state.

The ODWC appreciates the opportunity to review and provide comments on this project. For further assistance, please contact the Environmental Program 405-424-6062.

Sincerely,

William Ray  
Environmental Biologist





**APPENDIX E**

**CONSTRUCTION DESIGN PLANS**

# SURVEY CONTROL DATA

1. HORIZONTAL CONTROL
  - A. HORIZONTAL CONTROL FOR THIS SURVEY IS BASED ON ASSUMED COORDINATES
  - B. ACCURACY - 3RD ORDER OR BETTER
2. BEARINGS

THE BEARINGS SHOWN HEREIN OR HEREON ARE DERIVED FROM THE ASSUMED COORDINATES
3. VERTICAL CONTROLS
  - A. LEVEL DATUM "USGS DATUM"
  - B. ACCURACY - 3RD ORDER OR BETTER
  - C. BENCH MARK STD. TABLET MARKER 24 MES 1984 TOP EXISTING NORTH HEADWALL FOR DEL. 10+12.103 UNDER STATE HWY 98A WEST OF NS-358-ELEV. 923.18'



# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF INDIAN AFFAIRS BRANCH OF ROADS MUSKOGEE AREA OFFICE MUSKOGEE, OKLAHOMA SEMINOLE NATION OF OKLAHOMA SNAKE CREEK ROADWAY BIA PROJECT NO. CT G10T-90923 SEMINOLE COUNTY

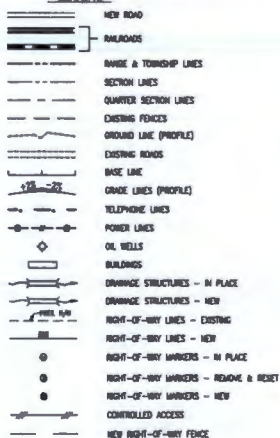
## INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS
3	SUMMARY OF PAY QUANTITIES & NOTES
4	SUMMARY SHEET I
5	SUMMARY SHEET II
6	SUMMARY SHEET III
7	STORM WATER POLLUTION PREVENTION PLAN
8-13	SOIL EROSION CONTROL
14	DRAINAGE (CROSS DRAINS) CALCULATIONS
15	PROPERTY OWNER MAP
16	SURVEY DATA SHEET
17-19	TRAFFIC CONTROL
20-31	PLAN AND PROFILE SHEETS
X1-X22	CROSS-SECTIONS

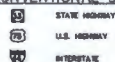
THE FOLLOWING ODOT STANDARDS WILL BE REQUIRED.

ROADWAY                      TRAFFIC

## LEGEND

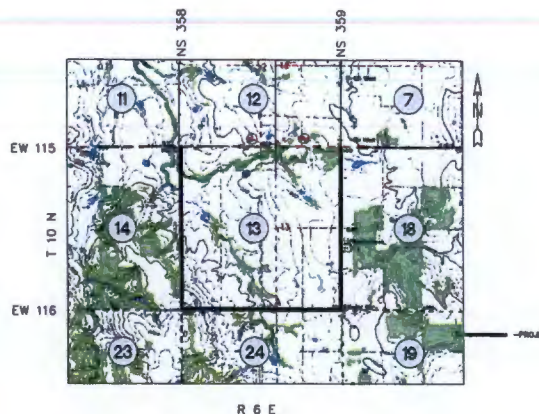


## CONVENTIONAL SIGNS



## DESIGN DATA

ADT (2008) =  
ADT (2028) =  
DDV (2028) =  
TRUCK TRAFFIC =  
DESIGN SPEED =  
FLEX EQUALS =



## UTILITY COMPANIES

AT&T  
521 N. BROADWAY AVE  
SHAWNEE, OK 74801  
MR. WOODY HARJO  
1-405-275-8805  
WH0478@ATT.COM

SCS/ORTAL ENERGY  
CHAMBERLAIN GATHERINGS  
1307 S. BOULDER, STE. 200  
TULSA, OK 74119  
MR. TOM COLEMAN  
1-918-588-5048

CANADIAN VALLEY ELECTRIC  
P.O. BOX 751  
SEMINOLE, OK 74868  
MS. KIM BEHRNS  
1-405-362-3680  
KIMBEHRNS@CANADIANVALLEY.ORG

## HORIZON ENGINEERING SERVICES CO.

1414-A EAST 71st STREET  
TULSA, OKLAHOMA 74136  
(918) 663-0870



LOCATIONS OF UNDERGROUND UTILITIES WERE OBTAINED FROM THE UTILITY OWNERS. BEFORE DOING ANY WORK WITH HEAVY EQUIPMENT, THE CONTRACTOR SHALL NOTIFY THE UTILITY OWNERS OF "CALL ONE (OKLAHOMA ONE-CALL)" NOT LESS THAN 48 HOURS IN ADVANCE AND SHALL ESTABLISH THE EXACT LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES.

THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, OKLAHOMA DEPARTMENT OF TRANSPORTATION 1999 EDITION AND SUPPLEMENTS WITH APPROVED EXCEPTIONS SHALL BE THE STANDARD SPECIFICATIONS FOR THIS PROJECT. SUPPLEMENTAL SPECIFICATIONS SHALL GOVERN OVER STANDARD SPECIFICATIONS.

ROADWAY LENGTH	-----	FT	-----	MI
BRIDGE LENGTH	-----	FT	-----	MI
BRIDGE EXCEPTION	-----	FT	-----	MI
PROJECT LENGTH	-----	FT	-----	MI
INCIDENTAL CONSTRUCTION	-----	FT	-----	MI
EQUATIONS	-----	NONE	-----	
EXCEPTIONS	-----	NONE	-----	

LENGTHS ARE BASED ON C.R.L.

DEREK D. GARVIN                      P.E. 19219

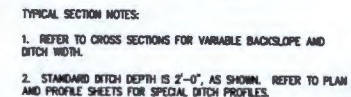
U.S. DEPARTMENT OF THE INTERIOR BUREAU OF INDIAN AFFAIRS	SEMINOLE NATION
RECOMMENDED FOR APPROVAL	APPROVED
DATE                      REGIONAL ROAD ENGINEER	DATE                      CHAIRMAN



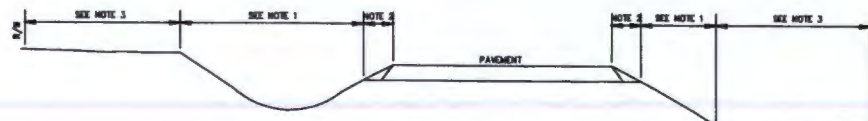
1. THE CONTRACTOR SHALL STRIP ALL OF THE AVAILABLE TOPSOIL WITHIN THE LIMITS OF CONSTRUCTION. STOCKPILE THE MATERIAL AND REPLACE THE TOPSOIL ON THE FINISHED SLOPES AS DIRECTED BY THE CONTRACTING OFFICES REPRESENTATIVE.

2. THE GRADING LINE AS SHOWN ON THE TYPICAL SECTIONS AND CROSS SECTIONS IS TO THE TOP OF THE TOPSOIL.

TO BE BACKFILLED WITH TBSC TYPE E. MATERIAL SHALL BE WATERED AND COMPACTED WITH A RUBBER TIRE ROLLER. ACCEPTANCE SHALL BE BASED ON "VISUAL INSPECTION".



### TYPICAL SECTION



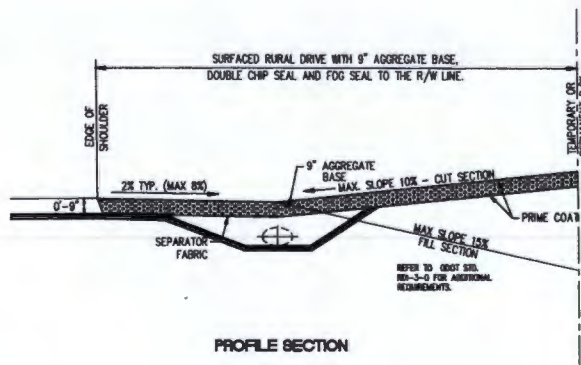
### EROSION CONTROL TYPICAL SECTION

- NOTES:

1. SIGN BLANK IS 24" X 18" WITH RADIUS OF 1.5".
2. FONT IS SANS SERIF. CAPITAL LETTERS ARE TWO INCHES HIGH.
3. BORDER IS  $\frac{1}{8}$ " WIDE.
4. LEGEND AND BORDER ARE BLACK (TYPE VB)
5. BACKGROUND IS WHITE.

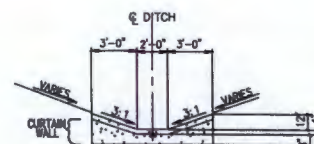
- NOTE:  
1. SOLID SLAB SOO  
2. I.B.C., TYPE E  
3. SEEDING METHOD "A" & VEGETATIVE MILLING

**SPECIAL ESA SIGN**



### PROFILE SECTION

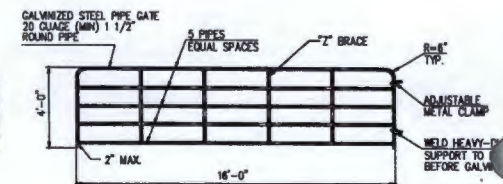
### TYPICAL DRIVE



## CONCRETE DITCH LINER


NOTE:  
REFER TO ODOT STANDARD DRAWING DC-3-0  
FOR ADDITIONAL NOTES AND DETAILS.

DITCH LINER LOCATIONS:  
STA. 224+95 TO 228+46 RT



**TUBULAR STEEL PIPE GATE DETAIL**

### TYPICAL SECTION AND DETAILS



**HORIZON ENGINEERING SERVICES CO.**  
 1414-A EAST 71ST STREET  
 TULSA, OKLAHOMA 74130  
 TEL. (918) 883-0870 FAX. (918) 827-1930

[illegible]

